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## NEWS: EUROPE

## Threat to Yeltsin poll hopes averted

# Russian miners call off coal stoppage

By John Lloyd in Moscow

Russian coalminers last night called off a strike which had threatened to undermine President Boris Yeltsin's election campaign in the last days before the poll.

Interfax news agency said that union leaders from the Arctic coal basin of Vorkuta had signed a peace deal with the government and had agreed to resume work today.

Earlier yesterday the strike had spread across three regions when the 30,000 Vorkuta miners were joined by thousands of workers in the Urals and in northern Siberia. The Independent Miners' Union called out its members to protest against non-payment of wages and over a range of other complaints.

Strikers also demanded a government reshuffle by Mr Yeltsin, who faces parliamen-

tary elections on December 12 and has traditionally enjoyed strong support among miners.

Ahead of last night's peace deal, miners in the main Russian coalfield of the Kuzbass were considering joining the strike today, according to Mr Sultan Mamedov, deputy president of the Independent Miners' Union.

The strikers, who had produced a list of 25 demands, were most aggrieved over long delays in wages payments and in the rapidly worsening situation in the coalfields - as rail tariffs for coal carriage soared, increasing the indebtedness of the pits and the insecurity of the miners. The government has recently proposed a programme of closures of more than 40 pits nationwide, including four of the 13 in Vorkuta, an area almost wholly dependent on the mines.

• A new finance and industry group has been established and

charged by Mr Yeltsin with the task of "furthering the reconstruction of the Russian economy, accelerating scientific and technical progress and raising the export and competitive potential of Russian enterprises".

Mr Yeltsin's decree establishing the group also orders the state committees for industrial policy and for property to set up two "experimental" financial-industrial groups - an apparent attempt to create large industrial holdings with their own banks and investment houses along Japanese lines, a route which is favoured by many industrialists.

• Mr Viktor Chernomyrdin, Russian prime minister, has been admitted to hospital for treatment of a kidney ailment. His press spokesman said his condition was not serious and he would be back at work soon.

## Commission to challenge shipping pact

By Andrew Hill in Brussels

The European Commission is about to lodge detailed objections to a powerful agreement among shipping lines operating between Europe and north America.

At its meeting tomorrow, the Commission is likely to approve a "statement of objections" to the Trans-Atlantic Agreement, opening the next phase of an investigation into the accord, which was signed by 15 large shipowners last year in an attempt to fight overcapacity and cut losses.

Big European Union exporters claim that the TAA is an illegal cartel through which shipowners have imposed "exorbitant" rate increases for 1993 on exports to the US.

The 15 signatories - including P&O Containers of the UK, Hapag-Lloyd of Germany and Maersk of Denmark - say the agreement is a legal "conference" of shipping lines, exempt from European competition rules.

Shipowners will be asked to

respond to the Commission's objections. If Brussels concludes that the TAA is illegally fixing unfair prices, it could impose heavy fines on the participants, as it did last year on two cartels operating between Europe and Africa.

Last week, EU exporters claimed to have seen off an attempt by the shipowners to ease the anti-trust rules on shipping cartels.

Union transport ministers agreed to withdraw a draft resolution on the competition rules for maritime transport after the Commission promised to report on the scope of its regulations by the middle of next year. Exporters claimed the resolution was the work of the shipowners, trying to bully the Commission into clearing the TAA.

The shipowners want Brussels to clarify the legal situation, particularly as it relates to new door-to-door container services. They claim they cannot make ends meet without the help of agreements like the TAA.

## Petrochemicals criteria listed

By Paul Abrahams

The conditions required for Europe's troubled petrochemicals industry to restructure were set out yesterday by Mr Carol van Miert, European competition commissioner.

The Association of Petrochemical Producers in Europe (APPE) is due to meet on December 17 to discuss possible rationalisation of Europe's production of ethylene, the basic building block of plastics. Mr van Miert said facts rather than arguments would be the key to the Commission's assessment. Writing in European Chemical News, he listed five criteria that needed to be met before the Commission would approve the plan.

The participating companies would have to convince the Commission that:

- the situation facing the industry was not merely a dip in the business cycle, but rather a true structural crisis;

- there was no reasonable hope for recovery as long as outdated structures had not been adapted to prevailing new requirements of the business;

- the crisis affected the entire sector and the proposed solution involved all players. This would avoid allowing some to secure competitive advantage to the detriment of others;

- the scheme would not have the effect of putting off required rationalisation; and the crisis was not being used by less competitive companies to avoid doing something about their own inefficiency.

Mr van Miert also warned: "I should be very glad to believe the era of major (anti-competitive) arrangements is now over, but if that is not the case, the Commission will not hesitate to take appropriate action."

The APPE is proposing to set up an industry fund worth about DM500m to help close capacity.

## Time slips away for Romanian reforms

By Anthony Robinson

Romania must take tough decisions within the next six months or lose the chance to reform its economy, Mr Mircea Cosoaia, Romania's recently appointed economic reform co-ordinator, said in London yesterday.

"We have wasted too much time before getting down to serious structural economic reforms," he admitted.

In an interview during an investment conference organised by the Confederation of British Industries, Mr Cosoaia, the deputy prime minister, said he would use the new executive powers granted to his economic reform council last month "to eliminate loss-making enterprises, speed up privatisation and liberalise the foreign exchange market".

The latter is of top priority. The reluctance of the shaky coalition government led by Mr Nicolae Vacaroiu to allow the leu, the Romanian currency, to be determined by market forces has been a main sticking point in long negotiations with the International Monetary Fund for a new standby agreement.

But an estimated \$3bn in finance from the IMF, the World Bank and other institutions hangs on parliamentary approval of the terms of IMF memorandum negotiated recently in Washington. Mr Cosoaia forecasts that parliament will approve the tough IMF terms by February, although it may be necessary to introduce temporary heating and energy subsidies to ease the pain.

## Ukraine halts all bank loans

The Ukrainian government and central bank have banned bank loans until January to fight hyperinflation, but bankers have said the move could ruin the banking system. Reuters reports from Kiev.

The move follows the government's suspension of transactions on Ukraine's sole currency exchange last month in an attempt to contain the collapse of the financial system.

## Four key mayoral races: the winners and runners-up

Rome	Naples	Venice	Genoa
<p>Francesco Rutelli Party: Greens % of vote: 53.1</p> <p>Gianfranco Fini Party: MSI % of vote: 46.9</p>	<p>Antonio Bassolino Party: PDS alliance % of vote: 53.8</p> <p>Alessandra Mussolini Party: MSI % of vote: 44.4</p>	<p>Massimo Cacciari Party: PDS alliance % of vote: 55.4</p> <p>Aldo Marchionne Party: Northern League % of vote: 44.6</p>	<p>Adriano Panella Party: PDS alliance % of vote: 59.2</p> <p>Enrico Serra Party: Northern League % of vote: 40.8</p>

## Italy's former communists win the day with tactical strength

### PDS discovers joy of alliances, says Robert Graham



Municipal Elections

Mr Achille Occhetto could well afford to smile and indulge in superlatives as he watched the performance on Sunday night of his Party of the Democratic Left (PDS) in local elections. In Sunday's second round of voting, the PDS was confirmed as the one party with a solid national base, capable of moulding electoral alliances up and down the country. The PDS-dominated alliances made a clean sweep of the five major cities where polling took place - Genoa, Naples, Rome, Trieste and Venice. In the 129 towns with over 15,000 inhabitants the PDS and its allies captured 53 administrations.

"It is an extraordinary result," said the 57-year-old politician who was instrumental in winding up the old Italian Communist Party (PCI) and founding the social democratic PDS. "This is the triumph of a strategy (of alliances), not just for the PDS but for all progressive forces."

Mr Occhetto has convincingly demonstrated that a party need not obtain the most votes to be influential. Organisation and an ability to form a consensus around a local candidate and programme are just as important.

Under the new electoral system for local elections, approved in March, Italy switched to directly electing mayors in a first-past-the post system with a second round run-off in the absence of an absolute majority. Curiously parliament rejected the French-style run-off in the majority vote system agreed in August for general elections.

Nevertheless, both new systems encourage a polarisation of the electorate - at least towards two blocs or coalitions. This

polarisation has begun, even if the political formations are far from complete.

As a result of Sunday's local elections and the November 21 first round, the PDS has clearly staked a claim to be the central force in a broad leftist alliance to fight the next general elections, likely before the end of March. With this head start, it must seem at this stage to be the most likely nucleus of a future government.

The PDS gained the single largest number of votes in very few of the weekend's local elections, which affected 428 councils. However, it was the best organised, and the most capable of finding mayoral candidates that enjoyed a consensus among potential PDS allies.

Only one of the mayoral candidates in the five big cities was a formal PDS member, Mr Antonio Bassolino in Naples. The others were either independents sympathetic to the party (Mr Adriano Samsa in Genoa, Mr Riccardo Ily in Trieste and Mr Massimo Cacciari in Venice) or members of other parties - as with Mr Francesco Rutelli, the new Genoa mayor of Rome.

The PDS used strategic alliances in last June's local elections, when the new electoral laws were first tested. But the need for alliances appeared less necessary at that time. Most commentators and politicians believed the future political geography of Italy would be, in broad terms, a north controlled by the populist League of Mr Umberto Bossi, the centre dominated by the PDS and the south a fiefdom of the long ruling Christian Democrats.

However, the latest local elections witnessed the collapse of the Christian Democratic vote and of their long ruling allies, the Socialists, Social Democrats and Liberals.

Their supporters, long labelled the cen-

## Paris plans financial aid for small businesses

By David Buchan in Paris

Mr Edmond Alphandery, French economy minister, yesterday announced new loan guarantees for the country's struggling small businesses and urged commercial banks to follow the central bank in cutting the cost of credit.

The government is to give CEPME, a body specialising in equipment financing for small companies, a FF200m (\$341m) loan guarantee fund, which will allow it to advance companies with less than 500 employees advances on the unpaid bills due from local authorities. The minister also said he was considering "recapitalising" the CEPME which has been pushed into deepening losses by mounting bankruptcies of its client companies this year.

This follows a government move earlier this year to use public money to take half the risk of medium term bank loans to small businesses, and is all part of an effort to make the big commercial banks less nervous in lending to small companies on which recession has taken a disproportionate toll.

But Mr Alphandery also suggested commercial banks should lower their bank rate, currently at 8.15 per cent, after the Bank of France cut its floor intervention rate by a quarter point to 6.2 per cent last week. "We very soon ought to see the bank rate below 8 per cent," he said.



Markus Wolf, the former East German spy master, holds a bouquet of red roses as he enters a Düsseldorf court yesterday. Wolf, long known as "the man without a face" was sentenced to six years in prison for treason and bribery during the cold war. Arlene Genillard writes from Bonn.

The verdict was booed by his supporters and members of the Party of Democratic Socialism (PDS), who saw the trial as a show of force by the West German justice against former East German agents.

The sentence brings to a close a controversial seven-month trial which has called into question the validity of bringing to justice former East German spies. Doubts remain among legal experts about whether Wolf could be charged with treason against a country of which he was not a citizen - West Germany.

Lawyers for Wolf, who is on DM250,000 (\$148,000) bail, said they would appeal against the decision. He will remain free anyway until the constitutional court in Karlsruhe issues a verdict on the appeal of Mr Werner Grossman, his successor, after a Berlin court refused to send him to prison.

## Saleroom Givenchy furniture sets record

By Antony Thorncroft

A collection of 97 lots of French furniture and works of art, assembled over 30 years by the French couturier Hubert de Givenchy, sold for FF155.5m (\$36.44m) at Christie's in Monaco at the weekend. This was far in excess of the FF100m estimate, and set a record for a single owner auction of furniture.

The highlight was a 52kg silver chandelier made in 1736 by German goldsmith Behrens to a William Kent design for King George II's palace in Hanover. It was bought by the Middle Eastern collector, Al Tajir for FF19.82m, an auction record for any item of silver.

The chandelier is one of five which once hung in the Queen's Drawing Room and Ballroom at Windsor Castle. The other exceptional price was the FF18.87m paid for a bureau plat (table) by the celebrated 17th century furniture-maker Boulle. The bureau plat is made of ebony, brass and ormolu, and set a record for a Boulle item. It was the second highest price ever paid for French furniture at auction. In all, 78 lots found buyers.

The furniture had been displayed in Mr de Givenchy's Paris house in the heart of the fashionable Faubourg St Germain. Now 66 he has moved to a smaller home. The sale covered a selection of what remains one of the finest antique collections in France.

## Kohl's party third in state poll

By Judy Dempsey in Berlin

Chancellor Helmut Kohl's Christian Democrats last night fell behind the former communists into third place, in Brandenburg's local government elections.

The final result of the elections, the first council polls in any eastern German state since unification, are considered a barometer for the marathon round of local and state elections that will culminate in the federal elections next October.

The party that gained the most from a 59 per cent turnout - which clearly reflected disillusionment with the established political parties and particularly with Mr Kohl's governing coalition, led by the CDU was the Party of Democratic Socialism.

The PDS, successor to East Germany's former communist party, gained 21.23 per cent of the votes, 10 percentage points more than in the December 1990 federal elections in Brandenburg. The SPD, which governed Brandenburg increased its share by 2 points to 34 per cent, and the CDU saw its share of the vote fall nearly 14 points to 20.4 per cent. The Free Democrats, junior partner in Mr Kohl's coalition, ended with 7.1 per cent, two points below the federal election but better than expected.

The PDS is even in a strong enough position to clinch Potsdam, the state capital, in the run-off. Mr Rolf Kutznitz, a one-time self-declared informer for the Stasi, or former East German secret police, obtained 43.5 per cent, leading Mr Horst Gramlich, the SPD incumbent, with 30 per cent.

Also curious is that the greatest support - so far - has been for an independent candidate. Mr Wolfgang Pohl was elected mayor on first count for Frankfurt/Oder, one of the four most important cities in Brandenburg, after receiving 61 per cent of the counted votes.

Dozens of towns and villages in Brandenburg will vote in a second round of local government elections on December 19, after many candidates failed to secure a majority, or because of irregularities. However, officials from the SPD and the CDU yesterday said that would not significantly affect the outcome of yesterday's final count.

Wobble atop the pillars of state. Page 15

## New wave of bombs in Austria

By Patrick Blum in Vienna

A letter bomb badly injured a clerk yesterday and Austrian police defused three more in a wave of attacks against refugees and supporters.

Four people have been injured by the bombs in the past four days, including Mr Helmut Zilk, Vienna's mayor, who lost several fingers.

The attackers have been labelling the devices with the name of a 17th-century hero, according to Mr Franz Loesch, the interior minister, suggesting the letters might be coming from the far right.

In 1983, Count Ernst Rüdiger von Starhemberg successfully defended the Austrian capital against a siege by the armies of the Ottoman empire. A later Count Ernst Rüdiger Starhemberg took part in the Hitler and Wehrmacht and vice-chancellor in the fascist Dollfuss regime before the second world war.

## Chechens find life chilly outside the bear's embrace



ELECTIONS IN RUSSIA

Chechnya, on Russia's southern fringes will be the only region to boycott next weekend's parliamentary elections. It is a gesture of defiance, which, according to one local newspaper, will mean it "automatically falls out of the Russian Federation." The region declared its independence in 1991, but has gone unrecognized.

"It is useless to try to intimidate us. We can be good friends but very bad enemies," says Chechnya's leader, General Dzhokhar Dudayev, recalling Chechnya's past as indomitable warriors until their conquest by imperial Russia in the last century.

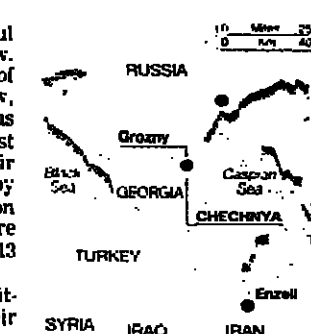
All that the region's defiance

'Independence' has benefited few, writes Leyla Boulton in Grozny, Chechnya

has achieved so far is a painful economic blockade by Moscow. Chechnya has a history of grievances against Moscow, the most serious of which was the deportation in 1944 of most able-bodied men from their homeland to central Asia, by Stalin, for alleged collaboration with the Nazis. They were allowed to return home only 13 years later.

But Chechnya's 1m inhabitants are now finding their enthusiasm for independence difficult to sustain when heating in many homes has been switched off, pensions and state sector salaries have remained unpaid for months, and crime is rife.

Having been promised that independent Chechnya, with its oil wealth, would become a



new Kuwait, they see that only a minority have got rich trading everything from stolen Mercedes 600s to oil products from Grozny's refineries.

President Dudayev, a flamboyant mustachioed former Soviet air force commander,

skirts around the problems, but Chechnya has got things under control, he insists to explain away the gunshot that rings out during an interview as "a wedding". He blames western and Russian pressure for the fact that not even "brotherly Muslim states" such as Iraq and Turkey, have recognised his "republic".

But Mr Hamzat Salaam, imam of Grozny's central mosque and one of the few opposition figures left in Grozny after the suppression of anti-government demonstrations this summer, dismisses both Mr Dudayev's threats and his talk of setting up an Islamic state.

"Nobody will go and fight... our ancestors fought

for their land and their religion. But what will people fight for today?"

Although officially Sunni Muslims, most Chechens pay only lip-service to Islam, which was officially discouraged during seven decades of communism. What they do genuinely embrace is a fondness for weapons and a long-standing tradition of blood-vengeance - avenging a life for a life.

Rather than any fears of Mr Dudayev declaring a holy war, the fact that so many Chechens now own weapons is enough to explain Russia's reluctance to use force to regain control of its 89th province.

When Mr Yeltsin tried to crush the first stirrings of independence by declaring emer-

gency rule over Chechnya two years ago, his order was rescinded two days later and all Russian troops were withdrawn from the area overnight.

But if all else fails, a now more confident Moscow may be prepared to try military force once more. Gen Dudayev has been invited to join other Caucasian leaders for talks with Mr Yeltsin in Nalchik today, but is unlikely to attend.

Meanwhile, aware of the dangers of sapping support at home, the Chechen authorities are trying to restore morale by "activising" law enforcement and paying the pensions and salaries halted by Moscow's suspension of subsidies and cash deliveries.

Colonel Salpudin Hassanov,

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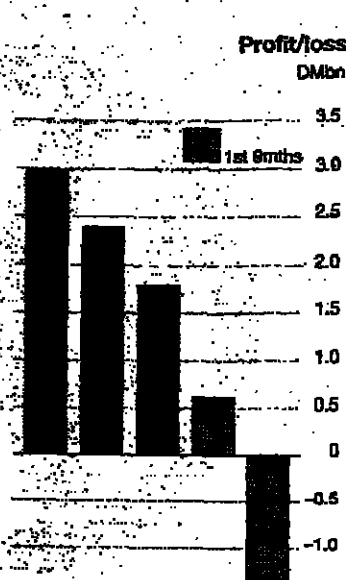
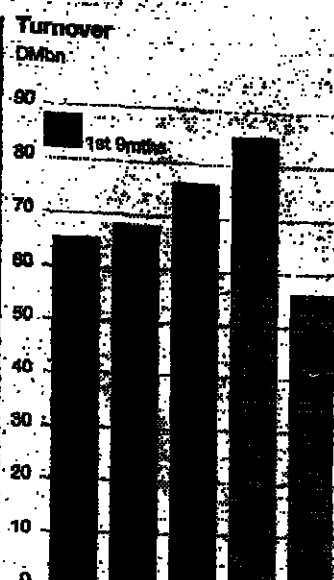
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VW sales weaken, profits plummet



Chairman Piëch



Chairman Piëch

# VW believes itself cleared

Criminal probe seen as private affair, writes Christopher Parkes

After 10 weeks' rooting about in the databases and filing cabinets of Volkswagen's Wolfsburg headquarters, auditors KPMG Deutsche Treuhand recently published selected highlights of a report. In the words of the man who ordered the investigation, it concluded: "There are no clues that industrial espionage took place to the benefit of Volkswagen."

Mr Klaus Liesen, chairman of the VW supervisory board and overseer of the group's corporate conduct, repeated it at dictation pace to ensure the assembled journalists got it right.

The investigation, and a criminal inquiry that is still going on, began after General Motors in the US alleged that former GM employees who defected to VW in March took with them huge quantities of confidential and market-sensitive company documents.

Mr Liesen, chairman of the Rulgas energy group, chose his words carefully at the recent press conference. He generated two clear impressions. The first was that he believed Volkswagen - the company as a legal entity - did not possess and had not made illegal use of any competitors' secrets. Mr Liesen seemed satisfied by the auditors' claims that material found at Wolfsburg which did not originate from VW's own sources was not confidential.

The second - more puzzling - was that the continuing criminal investigation of four senior VW employees for suspected theft of masses of confidential data from their former employer, General Motors, was neither his nor VW's concern. In other words, that the actions of Mr José Ignacio López de Arriortua, VW group production director, and close associates Mr Jorge Manuel Gutiérrez, Mr Jorge Alvarez Aguirre and Mr Rosario Piazza, were strictly their own affair.

The four men arrived in Wolfsburg virtually simultaneously last March, followed by clouds of suspicion generated by alleged information-gathering activities in the latter part of their service at GM and its German subsidiary Adam Opel.

As the KPMG report confirmed, within days of their arrival, two of them were busy in VW's Rotehof guesthouse unpacking, sorting, and destroying "in part" the contents of 20 cartons delivered to Mr López. It also emerged that they found time to make several thousand photocopies

while feeding the shredder. The box contents, according to Mr López and his colleagues comprised books, magazines, seminar material, hand-written notes, brochures and correspondence with GM component suppliers.

However, the KPMG investigators, who claim elsewhere to have employed the most sophisticated techniques to try to detect the presence of GM group secrets (how they managed this without cross-checking VW's database with those of GM/Opel is unclear) admitted they were unable "fully to establish" the whereabouts of material left unshredded. They merely reported that Mr López's lawyer told them the remaining "books and magazines" had been sent to his office and his home.

Nor were the KPMG sleuths, who were given a free rein to dig and question within VW, able to discover what was photocopied in the Rotehof, even though they know the copies did go into the shredder. Claims from Mr López's colleagues that it was "VW information material" for the Spaniard's team remained unsubstantiated, and KPMG had to be satisfied with their protestations that they "could not remember" what they had done with the copies.

The auditors also failed to pursue the paper chase beyond Wolfsburg. They did not, for example, investigate subsequent key events, known to VW management, including a visit to VW's Kassel works in Germany by Mr López's subordinates, who collected a shredder and "disappeared" for several days.

Kassel, some 150km south of Wolfsburg, is midway between the VW headquarters and the former home of Mr Piazza and Mr Alvarez in Wiesbaden where, witnesses allege, the duo filled a van "metres high" with sacks of shredded paper in mid-April.

A good two months later police recovered from the Wiesbaden house four boxes containing secret Opel price and model data. This find, in the words of the prosecutor's office, took the investigation "a decisive step forward". According to KPMG, three of the cartons originated in VW's Rotehof guesthouse. According to Mr López's colleagues, they took empty boxes from Wolfsburg to Wiesbaden. The origin of the contents found in the cartons later was not explained by KPMG.

And that, in Mr Liesen's view, is the end of the story. Meanwhile, Ms Dorothea Holland, the state prosecutor leading the German criminal investigation against Mr López and his men, continues her meticulous probes.

At hand is material equivalent to a tiny fraction of that apparently combed and

declared non-confidential by KPMG.

It comprises computer data, seized in a raid on VW in August, and known to contain material copied from GM and Opel documents.

According to Ms Holland's office, this little file alone would generate 2.5m pieces of paper if printed out.

## Volkswagen chairman presents medium-term strategy

# Piëch sees 'fat duck' carmaker ready to take off again in a year

By Christopher Parkes in Frankfurt

The fat duck of the German motor industry will be fit for take-off in around 12 months. With a following wind it will then soar, landing once a year to lay golden eggs in the laps of patient shareholders.

That is the plan, presented late last month to members of the Volkswagen group's supervisory board, by chairman Mr Ferdinand Piëch. Under his medium-term strategy, VW will return a pre-tax profit of over DM1.5bn (£1.5bn) in 1998.

The board, which at the same meeting swallowed the bitter pill of a looming DM2bn deficit this year, nodded and rubber-stamped Mr Piëch's project for off-loading more ballast. Out will go 50,000 more of the group's 245,000 worldwide workforce. Out also are earlier commitments to DM1.0bn of capital spending.

In are schemes to put some 100,000 German workers on a cost-saving four-day week, and to increase group vehicle output by a third, to almost 4m. Together with current programmes to push down component suppliers' prices by up to

30 per cent, and build all group models on three basic platforms with mostly common parts beneath the skins, the 1994/1998 medium-term strategy completes Mr Piëch's fitness diet.

Mr Piëch, who personally described VW as a duck grown too fat to fly, has in the past 12 months piloted the group through the worst slump in the European motor industry since the war. The flak thrown up by General Motors and its German subsidiary, Adam Opel, over the alleged theft of their strategic, model and pricing secrets by Mr José Ignacio López de Arriortua, has threatened VW's stability.

Now the chairman is striving to convince markets that his company is heading upwards, out of reach of gunfire and away from the danger of crashing under its own weight. VW's recent statements suggest that it could be close to breaking even within a year.

But group negotiators have yet to find a way out of a minefield in Spain, where some 9,000 Seat workers are scheduled to lose their jobs as a result of the closure of a redundant factory in Barcelona. The

company also has to restore its fortunes in the US market - where sales are down 37 per cent in the first 11 months of this year - and Japan.

Nor are VW's domestic problems clearly under control. While independent observers support company claims that cost-saving team working and continuous improvement programmes have been eagerly and effectively implemented by the workforce, the unprecedented four-day-week scheme has yet to be approved and put into practice. Hopes of saving DM1.5bn in 1994 through the scheme depend at least in part on the government's agreeing to contribute funds from its unemployment pay budget for workers laid off temporarily.

Furthermore, Mr Piëch is already suggesting that the scheme - and the associated income sacrifices - may have to run for longer than the two years originally planned. No more than 28.8 hours a week would be worked at VW for the "foreseeable future", he said in an interview published yesterday. Meanwhile, his medium-term plan foresees a further reduction in the German workforce. From the present payroll

of 103,000 employees building 1.4m vehicles a year, some 88,000 will be left in 1998, building 1.9m cars and vans.

Even more uncertain is the future of the chairman's right-hand man, Mr López, instigator of the production and components purchasing revolution within the group.

A recent internal audit apparently cleared Volkswagen of involvement in suspicions of industrial espionage against Mr López and colleagues who followed him from General Motors in March. But criminal investigations are still continuing in both Germany and the US into the alleged disappearance of data from GM and Adam Opel. The German investigators' findings are not due until spring, when, in the event of more unsavoury disclosures or even charges, the VW supervisory board could face a decision far more difficult than that of approving Mr Piëch's medium-term strategy.

In the past few months, Mr Piëch made plain his absolute trust in Mr López, implying that if his Spanish "soulmate" had to go, the supervisory board would have to reckon with his departure, too.

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# Ministry stops Hosokawa in his economic tracks

Japanese PM shelves stimulus plan. William Dawkins reports

The complexities of coalition politics, a new experience for Japan, have plunged the government's economic policies into apparent confusion.

Prime Minister Morihiro Hosokawa is in a tight spot. Over the past week he has been forced to delay plans for political reform - on which he has staked his own survival - to make way for action on the economy, only to run into a new blockage.

This one is the result of a dispute between the powerful Finance Ministry and the Social Democratic party, the biggest member of his seven-party coalition, as a result of which Mr Hosokawa has been forced to delay the latest round of measures to stimulate the economy.

Mr Hosokawa told a parliamentary panel yesterday that the government was planning no special economic stimulus, contrary to his own indications last week that the government was planning new pump-priming measures.

The plan last week was partly in response to a collapse in share prices on another set of grim economic statistics and suspicions that the government was not prepared to do any more to stimulate the economy. The market slid again yesterday when it heard that the plan was off for the time being.

"Because of the extraordinary difficulty in trying to boost the economy, the government's power base has been steadily eroded by the Finance Ministry," explains Mr Takashi Inaguchi, professor of politics at Tokyo University. "Mr Hosokawa may keep going for up to a year, but his room for manoeuvre is increasingly limited."

The possibility of an economic package, which would have been the fourth this year, was first raised at a meeting last Tuesday between Mr Hirohisa Fujii, finance minister, and Mr Hiroshi Kumagai, who holds the portfolio at the Ministry of International Trade and Industry, to discuss how to respond to the market slide

and the latest economic figures. Miti is understood to have called the meeting, under pressure from an anxious business community.

Options included a long-debated income tax cut, relaxation of rules on land and housing sales and moves to revive the stock market. Two days later, a gathering between Mr Masayoshi Takemura, chief cabinet secretary and a close ally of Mr Hosokawa, and the policy-makers from coalition parties agreed to launch a package along these lines early this week.

The official explanation for shelving the plan is that the government first needs parliamentary agreement on a ¥708bn (\$4.5bn) supplementary budget, needed to finance the previous economic package launched in September. Further stimulus measures could be included in next year's budget, due to be published in the final week of this month, said Mr Takemura yesterday.

All this suggests that the four-month-old government's inexperience is a factor in the hiatus. On top of this, it ran into bad luck when a former cabinet minister, Mr Keisuke Nakamichi, responsible for the defence agency, brought parliament to a halt for a valuable day by suggesting the constitution be revised to allow Japanese troops to play a larger United Nations role. That inconvenient side-show cost Mr Nakamichi his job.

Yet there remains an unresolved dispute between the socialists and the Finance Ministry over government funding. The finance bureaucrats can only accept an income tax cut on condition that the loss of government revenue will be covered by a rise in consumption tax. On their side they have the influential coalition partner, the Japan Renewal party.

The socialists cannot accept a rise in sales tax, on the grounds that it would hit their electoral heartland, lower-income voters. So the socialists propose deficit bonds for the time being, to the Finance Ministry at a time when it risks an explosion of public debt, according to a report last week



Prime Minister Morihiro Hosokawa confers with MPs during a budget committee session yesterday

on Japan by the Organisation for Economic Co-operation and Development. Mr Hosokawa stands in the middle and has sensibly kept his public pronouncements free of detail on this subject.

Most analysts believe that given time, the coalition partners will be able to strike a compromise on tax. They have after all, got close to agreeing on a gradual opening of the rice

market, a perennially touchy issue. This matter, on which the coalition is just as divided as on tax, has been handled with surprisingly little fuss, perhaps helped by Japanese rice farmers' relative complacency.

"I am sure we will get some form of package. But first Mr Hosokawa has to balance the interests of the Finance Ministry, which he cannot afford to offend, against those of the stock mar-

ket," says Mr Jesper Koll, chief economist at SG Warburg Securities in Tokyo.

The embattled Mr Hosokawa might take a little comfort from the thought that despite the challenges on every side, nobody wants to bring him down yet. For his popularity continues to increase - and no mainstream party would gain from killing a government devoted to political reform.

# Arafat insists Israelis stick to deadline

By Julian Ouzane in Jerusalem and James Whittington in Amman

Rising Arab-Jewish bloodshed and deepening tension between Israel and the Palestine Liberation Organisation threatened the Israeli-Palestinian peace process yesterday as Mr Yasser Arafat, PLO chairman, insisted Israel stick to a deadline six days away for the start of military withdrawal.

One Palestinian and two Israelis were shot dead in separate incidents of violence.

Mr Arafat's demand that Israel keep its promise and start withdrawing troops from the occupied Gaza Strip and West Bank area of Jericho next Monday was rejected yesterday by Mr Yitzhak Rabin, Israeli prime minister, who said a delay of two to three weeks was inevitable because both sides have yet to reach agreement on security, military and economic issues.

Israel meanwhile welcomed two humanitarian gestures made by Syria, which will grant exit permits to Syrian Jews and co-operate in the search for seven missing Israeli soldiers. The moves were widely interpreted in Jerusalem as confidence-building signs of progress on the stalled Israeli-Syrian peace talks, which are the focus of current Middle East shuttle diplomacy by Mr Warren Christopher, US secretary of state.

In Amman Mr Arafat, who met Mr Christopher yesterday, said he had asked the US to put pressure on Israel to meet its obligations under the Israeli-Palestinian peace accord and start a phased troop withdrawal next Monday. Mr Christopher called for "timely implementation".

Mr Arafat's insistence on the December 13 deadline follows a week of violence between Israelis and Palestinians amid fears that extremists on both sides are stepping up tension. Yesterday, gunmen fired on an car, killing two Israeli settlers in the occupied West Bank town of Hebron. Israeli undercover troops shot dead a Palestinian as he sat in front of his house in a West Bank village.

In Cairo, where the two sides are discussing military and security issues, Mr Nabil Shaath, chief PLO negotiator, said the talks were at a standstill. The two sides have yet to agree the size of the Jericho area and who will control border crossings. Mr Shimon Peres, Israeli foreign minister, said the two sides were near to agreement providing for Israeli control of the crossings but with a Palestinian presence.

In Paris Mr Avraham Shochat, Israel's finance minister, met Mr Ahmed Qurie (also known as Abu Ala) to examine the future relations between Israel and the Palestinian economy. Disagreements focus on an Israeli proposal for a customs union with the harmonisation of taxes and duties.

Mr Rabin said the Syrian gesture on Israeli soldiers was "an important step forward". After talks with President Hafez al-Assad of Syria on Sunday Mr Christopher said Damascus had agreed to help with the search for seven missing Israeli soldiers and to grant exit visas by the end of the year to all Syrian Jews who wished to leave the country.

Mr Christopher said he would return to Damascus on Thursday after holding a second round of talks with Israeli leaders this morning.

# Drug row flares as calls for tighter guidelines grow

By Emiko Terazono in Tokyo

Japan's ministry of health and welfare is facing mounting public criticism for not approving an anti-cancer drug which has led to the deaths of 20 among 477 patients during clinical tests.

The disclosure follows a case where 14 people died after tak-

ing a shingles drug since it was launched last September. It may heighten calls for tighter approval guidelines by the Japanese government, which is trying to increase the international competitiveness of the country's drug industry by encouraging companies to become more innovative.

Irinotecan hydrochloride,

jointly developed by Yakult Honsha and Daiichi Pharmaceutical, is believed to be effective in curing lung, uterine and ovarian cancer. However, in clinical tests, 27 people died within a month of taking the drug, of which 20 deaths were caused by the drug's side-effects.

A majority of the patients

who underwent test treatment showed side-effects; some 80 per cent showed a decrease in the number of white blood cells, and more than half suffered from diarrhoea or nausea.

Treatment using anti-cancer drugs is known to cause severe side-effects, and Daiichi officials deny suggestions that the

number of deaths and patients suffering from side-effects are higher relative to other cancer drugs.

The drug was approved last week by the Central Pharmaceutical Affairs Council and the ministry is due to decide next month whether it can be put on the market.

In the case of deaths follow-

ing sorivudine, the shingles drug, the health ministry blamed doctors for not reading warnings against the combined use of the drug with an anti-cancer treatment, while doctors have criticised the ministry and Nippon Shoji, the drug company, for not placing stricter warnings on the drug.

## NEWS IN BRIEF

# Bhutto family hit as feud erupts

A feud within the family of Pakistan's prime minister Benazir Bhutto erupted afresh yesterday when Mrs Nusrat Bhutto, her mother, challenged her own overthrust as co-chairperson of Ms Bhutto's ruling Pakistan People's Party, Farhan Bokhari writes from Islamabad.

The PCC party's central executive committee decided on Sunday to replace Mrs Bhutto senior by transferring all powers to the prime minister. Before that, the two women had equal ranking in the party.

"No one can remove me. I was nominated as chairperson for life by my husband, Zulfiqar Ali Bhutto, and I will not allow anybody to throw his decision into the dustbin," Mrs Bhutto senior, 63, said in Karachi yesterday.

Mrs Bhutto was appointed to chair the party in 1977 after her husband was arrested following a military takeover. He was hanged two years later. The two women became co-chairpersons in 1986 after Ms Benazir Bhutto returned from exile.

Recently, they have appeared increasingly estranged over the future of Mr Murtaza Bhutto, the prime minister's brother, who returned from exile last month and has been in prison since. Mr Bhutto was arrested on charges that he ran a terrorist campaign against the military regime of the late Gen Mohammed Zia ul-Haq. Mrs Bhutto wants her son to chair the party.

The split threatens to produce a splinter group which would dent the PPP's support base.

## Indian bomb blasts

Indian police tightened security in several states after a series of bomb blasts on four Delhi-bound express trains and one train from the capital left two killed and 18 injured yesterday, writes Shitaz Siddiqui in New Delhi. The campaign coincided with the first anniversary of the destruction by Hindu fanatics of a 400-year-old mosque in Ayodhya, northern India.

The Home Ministry has ordered an inquiry into the blasts. Shops and schools in Muslim-dominated areas of Bombay closed yesterday to protest against the destruction of the mosque last year and to mourn the nearly 2,000 who died in ensuing riots.

## Australian mill strike

Strike action yesterday hit three crushing mills operated by Bundaberg Sugar, the Australian sugar group which was acquired by Britain's Tate & Lyle, writes Nikki Tait in Sydney.

The action is thought to involve 700-800 workers, and to be related to current enterprise-based pay talks. The employees are believed to have begun an overtime ban on Friday, and moved to full strike action yesterday, despite industrial relations commission hearings in Queensland.

## Singapore trial adjourned

The Singapore trial of three economists and two journalists accused of breaching the island republic's official secrets act by prematurely disclosing an official economic growth estimate has been adjourned until Thursday, writes Kieran Cooke in Kuala Lumpur. Prosecution and defence have sought more time to study a new charge brought against one of the defendants. All five have pleaded not guilty to the charges.

# Canberra seeks to cool Malaysia row

By Nikki Tait in Sydney and Kieran Cooke in Kuala Lumpur

Mr Gareth Evans, the Australian foreign minister, yesterday urged a "cooling off period" in the diplomatic row between his country and Malaysia before it develops into a full-blown trade dispute.

"It's in nobody's interest that the present problem with Malaysia escalates any further," said Mr Evans.

"I hope very much the Malaysian cabinet may be prepared to accept a cooling-off period, a pause for reflection before taking further punitive or retaliatory measures of the kind that have been foreshadowed."

The Malaysian cabinet is due to discuss the issue tomorrow and there is apprehension in Australia that diplomatic relations between the two countries may be downgraded with

Malaysia imposing sanctions on Australian goods and services.

The row between the two countries broke after Mr Keating, Australia's prime minister, described Dr Mahathir Mohamad, his Malaysian counterpart, as a racist.

Malaysia's foreign minister, Mr Abdulah Ahmad Badawi, said he was disappointed that Mr Keating had not attended last month's Asia-Pacific Economic Co-operation summit in Seattle.

Malaysia says a letter sent

by Mr Keating to Dr Mahathir stops short of an apology and various Malaysian government departments have been directed to curtail contacts with Australia.

Yesterday a scheduled meeting in Kuala Lumpur between Mr Abdullah Ahmad Badawi, Malaysia's foreign minister, and Mr Peter Cook, the visiting Australian trade minister, was cancelled by Malaysian officials.

# Jakarta go-ahead for more Hawk aircraft

Indonesia's air force has been given the official go-ahead to discuss buying 16 more Hawk aircraft from British Aerospace, foreign aviation officials say. Reuter reports from Jakarta. BAE won an Indonesian order in June for 24 Hawk trainers and ground-attack fighters worth about \$500m. The first aircraft are due to be delivered in 1998.

The officials said the air force, with

some 80 combat aircraft, had been told by the government it could proceed with talks for more Hawks but it was not clear when negotiations would start. An air force spokesman confirmed the need for more aircraft.

Air Chief Marshal Sir Michael Graydon, Britain's chief of air staff, visited Jakarta last week for talks with military leaders. His visit came shortly after BAE said it

might set up joint ventures with Indonesia on turboprop aircraft and cars.

Indonesia's military chief, Gen Feisal Tanjung, confirmed in June the country planned to buy about 100 new warplanes over 25 years. US-designed aircraft, including F-16 Fighting Falcons, F-5E Tigers and A-4E Skyhawks, form the backbone of Indonesia's present air-combat capability.

# White rule comes to an end in Africa today

Patti Waldmeir reports on a multi-racial transitional government in Cape Town

Nearly 350 years of white domination in South Africa will formally end today in Cape Town when blacks take their seats on a multi-racial Transitional Executive Council charged with overseeing government until all-race elections in April next year.

Ironically, the first meeting of the 20-party TEC will be held on the premises of the President's Council, a body set up by the hardline then-President P. W. Botha in the 1980s to ensure that whites could always overrule deputies classified coloured (mixed-race) and Indian in the tricameral parliament from which blacks were excluded.

The similarity ends there: for contrary to the government's original plans for the TEC, it is likely to find it hard to veto decisions of the council. Though President F. W. de Klerk continues to insist that the TEC will not be able to bypass the government, political realities could dictate differ-

ently. The government will find it extremely difficult to ignore TEC decisions, and with most of its potential allies refusing to join the council, it has little hope of out-voting the African National Congress bloc.

The TEC's remit, set out in legislation passed last September, is so vague as to be either meaningless or limitless. It is charged with "levelling the political playing field" and creating the conditions for free and fair elections on April 27. As ANC officials point out, with elections dominating South Africa's political life, virtually any government action could be interpreted as coming within the TEC's authority.

Still, the council is unlikely to have the time, the personnel or the experience to intervene in any but the most crucial decisions. Overall, its powers are more negative than positive: it can stop certain things from happening, but cannot initiate action. But

some of these "negative" powers are important: it can veto the deployment of army units to combat political unrest; its assent is necessary to declare a state of emergency; and no foreign loans can be raised without its approval.

The TEC will have seven sub-councils, covering law and order, defence, intelligence, finance, regional and local government, foreign affairs, and the status of women. The first three are likely to prove the most important, providing for limited joint control of the security forces in the volatile period before the elections. No state of emergency or period of martial law can be declared without its support, though the Police Board and the Special Electoral Court, respectively, can overrule it in these matters.

The TEC itself will comprise one member from each political party or government which participated in the multi-party talks which last month

adopted a new constitution. The Afrikaner Volksunie, the right-wing white party has refused to participate in the TEC. So has Chief Mangosuthu Buthe, leader of the Inkatha Freedom party who has said that the government of the KwaZulu black homeland, which he heads, will not respect the TEC's authority.

Last-minute efforts were made yesterday to get Inkatha and other right-wing parties to accept the new constitution and join the TEC before parliament adopts the constitution finally, sometime before Christmas. But they seem unlikely to do so, raising the prospect of further bloodshed when the TEC tries to impose its authority in homeland areas.

The TEC will take decisions by consensus, or by a 75 per cent majority where that fails. Sub-councils will require either a two-thirds majority (finance) or three-quarters (defence,



Patten: defiant

The meeting of the Joint Liaison Group - a bilateral forum for processing the practical aspects of Hong Kong's transfer to China - comes against a background of escalating Chinese hostility towards British administration in the territory.

The two governments are at odds over Mr Patten's plans for democracy in the colony, a dispute which has bedevilled bilateral co-operation. Mr Patten is expected to gazette the first stage of democracy legislation on Friday, before its formal presentation in the Legislative Council, the colony's law-making body, next Wednesday.

This week's meeting is seen in Hong Kong as a test of China's promise not to let differences about the colony's political development get in the way of broader factors.

مكتبة الامم



## Caldera breaks mould in Venezuela

By Joseph Mann in Caracas

Mr Rafael Caldera, a 77-year-old lawyer, has won the presidential election in Venezuela, according to official figures released yesterday by the Supreme Electoral Council.

The outcome represents a big shift in modern Venezuelan politics.

Mr Caldera, running as an independent supported by 17 small political parties, broke the control that the country's two mainstream political parties, Democratic Action (represented in the presidential race by Mr Claudio Fermín) and the Christian Democrat Copei party (represented by Mr Oswaldo Álvarez Paz) have exercised over the presidency for 35 years.

Mr Caldera, who founded Copei in 1946, left the party he created to launch his presidential candidacy.

The outcome also is a defeat for advocates of free-market economic policies, which began to be implemented in Venezuela in 1989. Caldera and Velásquez opposed these policies; Fermín and Álvarez backed them.

Votes from the poll on Sunday are still being counted but Mr Caldera, who was president in 1989-94, had 28.5 per cent of tallied votes yesterday, followed by Mr Velásquez with 27 per cent, Mr Álvarez with 22 per cent, and Mr Fermín with 21 per cent.

Mr Fermín, a former mayor, recognised Mr Caldera's victory on Sunday night. Mr Velásquez, a labour leader, and Mr Álvarez, a former state governor, followed suit yesterday. There were no results yesterday in the congressional races held on Sunday, but the next Congress is expected to be fragmented, rather than dominated by Democratic Action and Copei as it was.

Mr Caldera, speaking to reporters, said that he did not know which aspects of the free-market reform programme in place would be discarded. See feature

## Buying into Argentina was the easy bit

John Barham on the problems faced by the new owners of former state companies



President Menem: Holding on to his authority

Picture: Guy Owen

Argentina has, in just three years, privatised almost all its state companies, bringing in \$19.1bn (£12.8bn) and attracting some of the biggest names in international business.

Yet many of the new owners have had to learn how to do business in Argentina the hard way. Turning chaotic state-owned companies into profitable businesses has not been easy.

Few have suffered as many setbacks as Iberia, Spain's state-owned airline. Soon after Iberia bought into the national airline Aerolíneas Argentinas in 1990, it found its local partners were insolvent. Then it began squabbling with the government over payment terms. The two reached a compromise only 18 months after the privatisation.

Iberia handled relations with employees badly. It cut jobs by a third to 6,800, leading to weeks of strikes and demonstrations. This further worsened Aerolíneas's fearsome reputation for rudeness and unreliability. At the height of the unrest last year, less than half its aircraft flew on time. Now it claims that 90 per cent of flights are on time.

Meanwhile, Aerolíneas bled cash. The consortium led by Iberia paid \$1.87bn in a cash and debt-for-equity swap for 85 per cent of the airline, but has already lost more than \$300m.

Mr Manuel Morán, president of Aerolíneas, says that only with the end of Iberia's battle with the government has he been able to start reshaping the company. He is enlarging and modernising the fleet, strengthening links with other Iberia-controlled airlines and developing Buenos Aires as a regional hub.

However, Iberia says

Aerolíneas needs about \$500m in fresh funds to rebuild its balance sheet and buy new aircraft. But the government, which still owns a third of Aerolíneas, says it will not contribute its share. Iberia retorts that Aerolíneas may collapse early next year without the cash injection.

The new owners of Argentina's former state companies have had other problems, not least the fact that all were riddled with corruption. Telecom Argentina, a telephone company jointly run by the French and Italian state telephone operators, set up an anti-corruption unit after privatisation

in 1990. The unit caught a top executive demanding bribes from suppliers. He was discreetly sacked and the affair hushed up.

British Gas, which led a consortium of local blue-chip energy companies to bid \$300m for the Buenos Aires gas distribution company Metrogas last December, says it tried to avoid such problems by carrying out due diligence procedures and vetting employees' backgrounds.

Mr Russell Herbert, managing director of Global Gas, the company's international arm, also says he tried to value Metrogas as accurately as possible before bidding. This may seem obvious, but Mr Herbert says that "some of the bids made by other companies were startling, to say the least".

ARGENTINE PRIVATISATIONS			
Company	Cash paid	Debt retired	Equity sold
Entel	\$2.271bn	\$5.0bn	90%
Aerolíneas	\$260m	\$1.61bn	85%*
YPF	\$3.04bn	-	45.3%
Gas del Estado	\$300m	\$1.54bn	70-90%**
Hidronor	\$162m	\$312.5m	59%†
SEGBA	\$280.8m	\$1.013bn	51-90%††
Real estate	\$163m	-	-
Others	\$2.51bn	\$525m	-
Total	\$9.01bn	\$10bn	-

Notes: Debt retired through Entel and Aerolíneas privatisations valued at nominal value. Others valued at market value, half face value.

\*Government subsequently took back 28 per cent of Aerolíneas.

†Government subsequently took back 28 per cent of Hidronor.

††Monopoly broken into 10 business units. Hidronor broken up into three companies. YPFSEGSA broken up into 7 units.

Winning the loyalty of employees is another vital step. Mr Juan Masjón, Telecom's president, says: "The really difficult thing is changing the company culture - to make it customer-oriented, to decentralise without losing control. It is very difficult to change the company without getting people involved."

Telecom has avoided serious unrest even though it sacked 4,500 employees and tightened slack working practices. Morale improved because it raised wages, improved training and offered better promotion prospects for those who remained.

British Gas found that employees responded well to the company's approach, less authoritarian than they had been accustomed to in the state sector. Mr Rob Verrion, Metrogas president, says that on taking over he found "people who had never seen a manager. They could not believe that anyone was taking an interest in them". Employees even came into the office on their days-off to attend training courses.

Mr Masjón could be speaking for all privatised companies as he reels off his list of priorities: doubling productivity, raising investment in training and data processing, reducing management layers and internal bureaucracy.

Nonetheless, Argentina's telephone system remains expensive and unreliable. As a result, competition from US-based call-back companies, offering 50 per cent discounts on international calls, is eroding the local industry's most profitable segment.

Handling the government, the press and public opinion are probably the trickiest problems of all. This is inevitable anywhere, given the conflicting interests of companies, regulators and consumers. However, the difficulties may be exaggerated in a poor country such as Argentina.

In May, a judge ordered the arrest of Mr Angel Zapalorto, a manager of Buenos Aires electricity distributor Edenor, after he cut off power to slums to stop illegal tapping into the electricity network.

Mr Zapalorto spent 72 hours in jail before being released. Edenor, part-owned by Electricité de France, last year lost \$50m on sales of \$700m, and claims electricity theft cost it \$150m.

As the novelty of privatisation wears off, Argentines are demanding better service to justify their sharply increased utility bills, particularly when some companies, such as the telephone operators, are reporting huge profits. Dissatisfied consumers are beginning to demand stiffer government regulation. Executives are aware that even though they may be running private companies, their performance remains a public issue.

## Talks stalled as Menem rejects plan to curb his authority

Talks between Argentina's government and the opposition over reforming the country's constitution stalled yesterday after President Carlos Menem rejected plans to reduce his authority, John Barham reports.

Mr Menem said he would not accept the broad powers proposed for a prime ministerial figure as part of an accord reached with the opposition Radical party to amend the constitution and allow him to

stand for a second term when his mandate ends in July 1995.

Mr Ricardo Gil Lavedra, a senior opposition negotiator, said the accord was "blocked" because the Radicals would only support re-election if the president's sweeping powers were reduced and the power of Congress and the judiciary strengthened.

In exchange for backing re-election, the Radicals won promises from the ruling

Peronist party to increase their representation in Congress, the judiciary and the government.

Earlier, Mr Menem said he would ask Congress to vote this week on reforming the constitution. Both houses of Congress must vote two-thirds in favour of amending the constitution before elections can be called to a constituent assembly to write the new text. Mr Menem's resistance is the first serious obstacle.

## Mexico, Venezuela and Colombia conclude free trade pact

By Damian Fraser in Mexico City and David Pilling in Santiago

Mexico, Venezuela and Colombia have concluded negotiations on a free trade pact to come into effect in the first half of next year, according to

Mexico's trade ministry.

The treaty will bring together economies with a combined population of about 150m, and gross domestic product of more than \$360bn (\$241.50bn) in 1991.

Mexico has already signed trade pacts with the US and

Canada, and separately with Chile. Colombia yesterday signed a free trade agreement with Chile.

The agreement between the "Group of Three" will have only a small economic impact, since trade between them is a small part of their total trade.

However, the agreement marks a step in Latin America's quest for economic integration and closer political co-operation.

Mexico's trade ministry gave no details of the agreement, except that it covered six areas: access to markets; rules of origins; investment rules;

government purchases; trade in services and intellectual property. Tariffs will be gradually phased out, rather than abolished immediately.

The Chile-Colombia accord, details of which were hammered out last month, scraps non-tariff barriers on all but

the most "sensitive" products from the start of next year.

From 1994, tariffs on 300 products, including coffee, wood pulp and synthetic fibres, will be cut by a quarter. The remaining 75 per cent of barriers and all customs taxes will be removed by 1999.

## Mexican economy contracts sharply

By Damian Fraser in Mexico City

Mexico's economy shrank by 1.2 per cent in the third quarter of 1993, compared to the equivalent period last year, by far the worst performance in the five-year administration of President Carlos Salinas.

The manufacturing sector contracted by more than 5 per cent in the quarter.

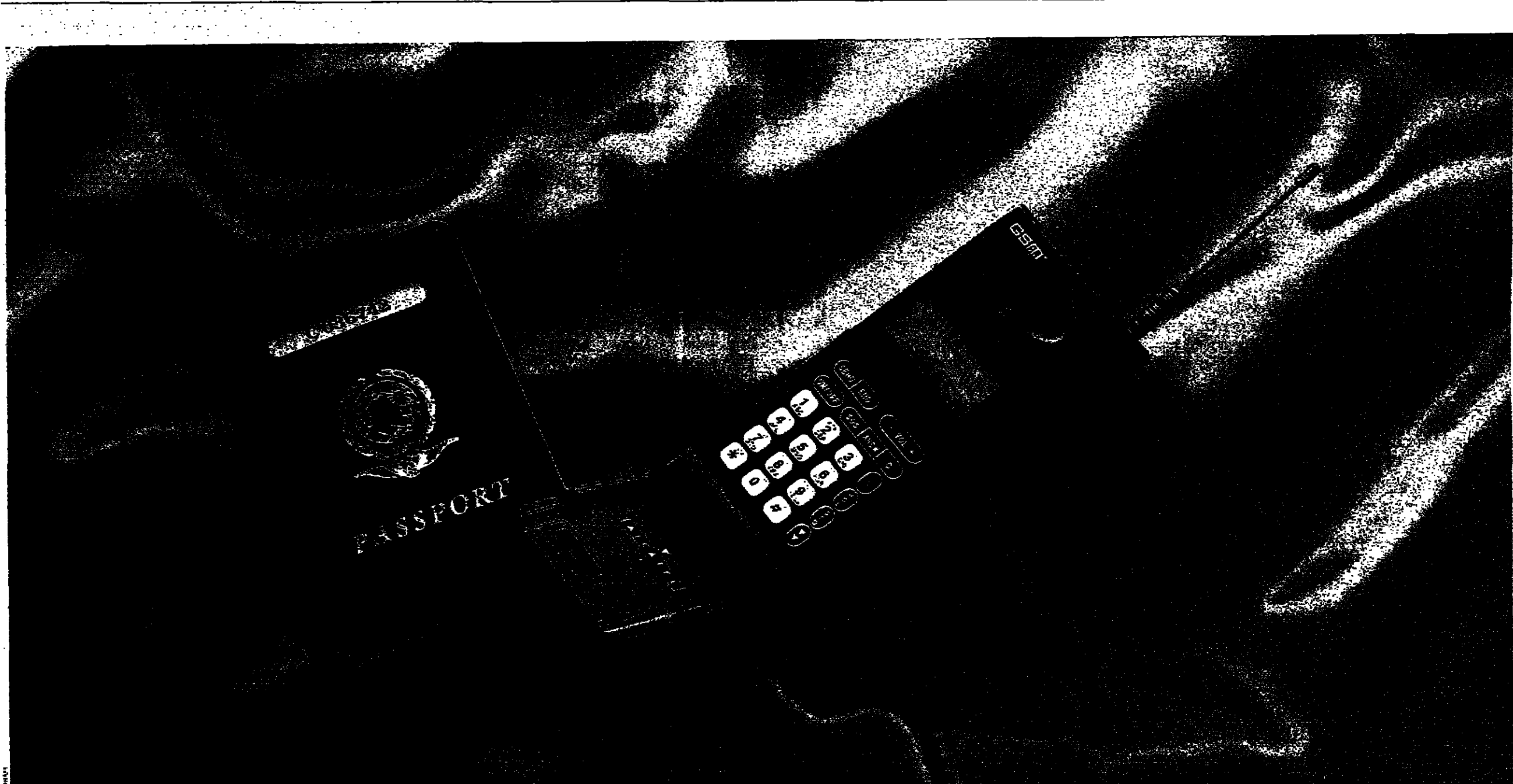
The economy, especially private investment, was hit by the government's restrictive monetary policy and by uncertainty over the North America Free Trade Agreement, said Mr Jonathan Heath, head of Macro Asesoría Económica, a consultancy in Mexico.

The government prefers to blame the slowdown on a weak world economy and restructuring of the private sector, much of whose productive capital has become obsolete as a result of Mexico's rapid trade liberalisation.

The finance ministry said the economy grew by 0.5 per cent in the first nine months, compared to the equivalent period last year. The service sector expanded by 1.4 per cent, while the industrial sector contracted by 0.3 per cent and agriculture by 1.2 per cent. The manufacturing sector shrank by 1.5 per cent in the nine months to September.

The third-quarter figures were much worse than expected, said Mr Rogelio Ramírez de la O, of the consultancy Ecanal. He was revising downwards his forecast for annual growth to 0.8 per cent for this year. The government's most recent forecast is for growth of 1.1 per cent.

Mexico's government kept interest rates high throughout most of the year and ran a budget surplus in an effort to maintain confidence in the economy in the run-up to the vote in the US Congress on the free trade agreement. While such a policy ensured a remarkably strong peso throughout the year, and has helped reduce the trade deficit, the real side of the economy suffered.



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## NEWS: WORLD TRADE

## Differences make pact impossible by deadline

# Hopes of multilateral steel agreement dashed

By Frances Williams in Geneva



Hopes of negotiating a Multilateral Steel Agreement by the Uruguay Round deadline of December 15 have been dashed by irreconcilable differences between the US and the European Union. Sir Leon Brittan, the EU trade commissioner, and Mr Mickey Kantor, US trade representative, yesterday agreed to zero tariffs on steel, which had previously been made conditional on an MSA deal, and to continue MSA negotiations into next year. Zero tariffs for steel were seen by the EU as essential in securing a balanced tariff package with the US.

The MSA would have eliminated tariff and non-tariff barriers to steel trade over 10 years and outlawed production subsidies. But the 36-nation

talks failed to resolve differences over allowable subsidies and the extent to which US anti-dumping and anti-subsidy actions should be curbed.

The MSA was conceived as a replacement for voluntary restraints by the EU and other leading steel exporters to the US market. The voluntary agreement expired in March 1992. Almost immediately afterwards, the US steel industry filed a series of anti-dumping and anti-subsidy suits. Although most of these were rejected, the move has bedevilled talks ever since.

The EU and others have sought to have existing duties lifted and to obtain guarantees against future trade harassment, including a pledge by the US not to take action against subsidies paid out before the MSA came into effect.

However, the US has refused to accept restraints on the right of US industry to petition against allegedly unfair subsidies, even the few specifically allowed by the draft MSA for

environmental improvements, plant closure, retraining, and research and development.

Washington still hopes for a MSA deal early next year, before Congress votes on the Uruguay Round results. If these negotiations fail, steel subsidies will be governed by the separate draft Uruguay Round subsidies accord. This lays down in general terms which subventions are prohibited, which are permissible and which are allowed but can be challenged by anti-subsidy suits.

In a parallel development, the draft subsidies accord has also been accepted as the basis for a revised voluntary code of fair trade practice for civil aircraft.

However, the US and EU are still wrangling over details of the proposed code, which is intended to generalise their bilateral deal on state supports for Airbus. The EU, as in steel, wants to ensure that the US cannot challenge past subsidies while the US is trying to keep subsidies to a minimum.

## Seoul braced for rice protests

By John Burton in Seoul and David Dodwell in Geneva

The South Korean government is braced for possible violent protests after reports emerged from Geneva that the government had agreed in principle to open the country's rice market as part of the Uruguay Round of trade talks.

Police are being placed on alert for a mass rally by farmers today in central Seoul to protest at the decision.

Korea is seeking a 10-year grace period before adopting a system of tariffs protecting local farmers. During this time, it would allow minimum access to foreign rice, rising from 3 per cent of total rice consumption at the outset to 5 per cent at the end of the grace period. Korean negotiators are also pressing for a moratorium on introduction of the minimum access arrangement.

Pressure on Korea to reach a compromise has mounted strongly over the past week as it has become clear that Japan, which also has a ban on rice imports, has negotiated a six-year moratorium, with market access rising from 4 to 8 per cent.

International trade negotiators have been increasingly unwilling to regard Korea as a



Koreans protest in Seoul yesterday against US pressure to liberalise the rice market

developing country, and thus concede to it the "special and differential status" which allows poorer countries to seek exemption from GATT rules.

In parallel with the rice issue, it has faced extreme pressure to open its financial services markets. Top US Treasury negotiators arrived in Geneva yesterday to tackle this issue not just with Korea, but with Japan and other newly industrialising Asian countries such as Singapore, Malaysia,

Indonesia and Thailand.

The rice issue has posed the toughest political challenge to President Kim Young-sam since he came to office in February and threatens to damage his popularity. Mr Kim has until now enjoyed wide public support because of his political reforms.

The president's decision to open the rice market is seen as a key test of his commitment to make the centralised and protectionist economy more

outward looking. Government officials explained that Korea had little choice but to lift its rice import ban if it was to avoid retaliatory measures against exports of its manufactured goods.

Korea has barred foreign rice by arguing that imports would threaten the survival of at least a fifth of the nation's 8m farmers. Rice, which accounts for 22 per cent of total farm produce, is the country's most important agricultural product.

## French farmers cool on deal

By David Buchanan in Paris

The French wheat growers' association yesterday reacted coolly to news from Brussels of a proposed transatlantic farm trade deal that included several American concessions.

The association welcomed apparent US agreement to reduce the impact of initial cuts in subsidised farm exports by choosing last year's level of exports, rather than the lower 1986-89 average, as the basis for reductions.

But it said it was still unclear whether the US would agree to restrain its corn gluten feed exports to Europe and whether cuts in subsidised exports could be adjusted upwards to take account of growth in world cereal demand.

Meanwhile, an alliance of labour-intensive industries in France yesterday banded together to denounce the Blair government for overlooking their interests. "France has been wrong to give preference to two decades - that of agriculture and the audiovisual sector," Mr Dominique Jacquet, vice-president of the country's textile federation, told a press conference.

## Break expected in dark cloud over Caribbean resorts

Canute James on the region's hopes of a better tourism season after three bad years that began with the Gulf war

Caribbean tourist resorts are expecting better times in the high season, which begins next week, after the hard times that began with the Gulf war three years ago and have continued with the recession in the industrialised economies.

Planners of the industry in the more than 30 member countries of the Barbados-based Caribbean Tourism Organisation say that signs of economic improvement in the leading markets such as the US, Canada and Europe indicated that the flow of tourists next year will be higher than the expected 22m stay-over and cruise ship visitors of this year.

Tourism brings significant relief for often hard-pressed treasuries, and the industry is

expecting visitor expenditure next year to be about 5 per cent higher than the estimated US\$10bn (\$6.7bn) of this year.

The hoped-for improvement would be due as much to what-ever improvement there is in recession-hit economies, as to a more business-like approach by the resort countries. Hoteliers once looked anxiously at the weather reports in North America and Europe, hoping a bad winter would force shivering hordes southward in search of the sun. Once fiercely competitive with one another, the resort countries have now implemented a multi-million dollar advertising programme to market the region as whole to potential visitors from North America.

There are, however, many problems which could still

frustrate the hopes for better times. Most of these, such as air access to the region, are outside the control of the industry's administrators. Pan

American Airlines and Eastern Airlines, which were big carriers between the Caribbean and North America, have collapsed. Although American Airlines has scheduled additional flights to Caribbean destinations, it is unlikely that any airline will continue for long with routes of marginal profitability.

Equally damaging for the industry is the realignment of international currencies. Caribbean hotel rates are US dollar-denominated. A depreciation of European currencies against the US dollar makes the Caribbean less of a bargain to European tourists. Potential visitors from the US may also consider a European holiday a better buy.

The Caribbean is also facing new and growing competition for the US tourist. Several states in the US have stepped up their promotion and marketing as safer and cheaper alternatives to a foreign holiday. A domestic holiday can be

appealing to prospective tourists in the US because it does not carry the uncertainties of factors such as currency changes.

A further problem is crime. The CTO said this year the level of crime had been increasing in most resorts. Attacks on tourists in several countries, and the murder of two in the past two years in Jamaica, have caused concern among the administrators of the industry in the region, who fear, with good reason, that adverse publicity would deter prospective visitors.

Some Caribbean governments have concluded that their economies are not getting enough out of tourism. This led some unilaterally to increase the tax on cruise ship companies for each visitor who disembarks. The members of the CTO wanted a uniform minimum head tax of US\$10, but some members balked after the cruise lines objected. After some confusion and confrontation with the shipping lines, a common minimum passenger tax of \$5 effective next April, rising to \$10 in October 1995, has been agreed.

There is also growing concern at the extent to which local sectors and services benefit from tourism. "What we in the Caribbean have to do is to develop linkages and so benefit more from tourism," says Sir

Neville Nicholls, president of the Caribbean Development Bank.

"There is too much concentration merely on seeing tourism or activity in the tourism industry as essentially hotel-based. While that is the core, it's the linkages to tourism - agriculture, services, transportation and so on - which need to be emphasised."

The overriding concern in the industry is that the quality of the product must be protected, and earnings increased, while the region improves its ability to attract tourists who may turn to increasingly competitive alternatives such as Mexico and the Pacific. After all, tourism now accounts for one in every four foreign dollars earned by the resort countries of the Caribbean.

## Russian gas package signed by Italy

A state-backed \$1.6bn finance package paving the way for equipment supplies by Italian companies to the Russian gas industry was signed in Rome yesterday, Robert Graham reports from Rome.

The 13½-year credit, organised by the state credit institute, Mediocredito Centrale, in conjunction with Banca Commerciale, will be covered by Sase, the export credit guarantee organisation. The main suppliers will be the state oil concern - Nuovo Pignone and Saipem.

Italian companies will upgrade and modernise part of the old Soviet gas production and supply system, with payment through gas supplies.

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# Sales of new cars and trucks accelerate

By Kevin Done,  
Motor Industry Correspondent

New car sales in the UK jumped by 19.4 per cent last month as the recovery accelerated. For the first time diesel cars accounted for more than a quarter of all UK new car registrations.

The UK is virtually the only car market in western Europe where new car demand has grown this year.

Registrations in the first 11 months have risen by 12.6 per cent according to figures released yesterday by the Society of Motor Manufacturers and

Traders. This compares with a fall of more than 15 per cent in western Europe in the first 10 months.

The recovery in UK new vehicle demand is becoming more broadly based as the commercial vehicle sector also emerges from recession.

Registrations of new commercial vehicles in November rose by 6.3 per cent year-on-year. Commercial vehicle sales remained depressed in the first half of the year but have now been higher than a year ago in each of the last three months.

The biggest gains in new car sales among the leading manufacturers

have been achieved by Fiat of Italy, Renault and Citroën of France, and Nissan and Toyota of Japan.

Fiat, which has struggled for several years in the UK, has increased its sales by 38 per cent this year following heavy investment to improve its dealer network.

Germany's Volkswagen, the leading European manufacturer, has been one of the main losers this year, with sales falling by 1.6 per cent in the first 11 months.

The first signs of recovery came from the heavy truck sector of the market late last year, as hauliers

began to replace ageing fleets. However, in the last two months higher demand has also been seen in the small business sector, with rising registrations of medium and heavy vans.

New car sales in November rose to 127,674 from 106,902 a year ago, while registrations in the first 11 months increased to 1,704,696 from 1,513,888 in the corresponding period last year.

Mr Alan Fulham, director of the National Franchised Dealers Association, claimed yesterday that "much of the increase in new car sales could be attributed to intensive marketing efforts" by carmakers, which were

squeezing profit margins. The SMMT admitted that the big jump in car sales last month was "quite startling".

The strength of demand for diesel cars has taken the industry by surprise. Sales of diesel cars in November accounted for 25.7 per cent of new sales compared with 15.9 per cent a year ago. In the first 11 months of this year diesel car sales jumped by 71.6 per cent to 335,004 from 189,934 a year ago, and increased their market share to 19.1 per cent from 12.5 per cent a year earlier. The diesel share has grown from only 6.4 per cent in 1990.

## Britain in brief



## Evacuation test set for tunnel trains

A large-scale evacuation involving 1,000 Channel tunnel employees, their wives and children is to be carried out just before the tunnel opens for business next March.

The test is intended to show whether Channel tunnel trains could be evacuated rapidly if there were to be a fire. Mr Edward Ryder, UK head of the Channel Tunnel Safety Authority said yesterday. The test will simulate the evacuation of a fully-loaded train either by road through the central service tunnel or by rail on the other track.

Mr Ryder did not rule out the possibility that tests of more complex parts of tunnel equipment might lead to a further delay in the opening but said: "we are confident that the design and concept of the project ought to be able to work safely," he added.

"failed to do all that was reasonably practicable to restrict the extent to which Mr Mollinari was exposed to ionising radiations".

## Roads costing basis examined

The government may in future award road-building contracts to companies which can guarantee to keep down future maintenance costs and not just to those which submit the lowest bid.

The department of transport yesterday announced the first contract to be awarded under a new "whole life costing scheme" which takes expected maintenance costs and traffic delays into account.

The department has spent two years devising a computer model known as Compare which assesses the total costs of different types of road surface. Contractors are given the figures for future costs to help them frame their bids.

## Tour operators lobby on tax

Large tour operators are to ask the government to start the new airport departure tax a month later than planned so as not to interfere with next summer's holiday programme.

The departure tax of £5 for flights within the European Union and £10 for trips elsewhere, announced in the Budget, is set to begin on October 1 next year. The Tour Operators' Study Group, which represents 80 per cent of package tour operators, says October 1994 holidays are already on sale as part of next summer's programme.

The group's preference is for the tax to be cancelled if it is to be implemented, operators would prefer it to start in November 1994.

## Freight dock for Bristol

Bell Lines, the Dublin-registered freight handling group, yesterday opened the first dedicated container terminal at Bristol's Avonmouth port.

The £2.5m terminal will be capable of handling 55,000 containers a year in its first phase with potential for expansion. It replaces one at Bellport, near Newport, south Wales, which had limited capacity.

## New home for opera scenery

A £4m scenery store for the Royal Opera House is to be built in Cynon valley, south Wales. The store, funded by the ROH with an urban investment grant of over £1m, will house all the ROH's scenery and props, now kept in several buildings near London.

The scenery will be stored in open-topped pallets to avoid damage caused by double-handling and a computerised coding system will be used to simplify shipping.

The pallets will be transported to and from London's Covent Garden by standard trailers, which will be able to complete the round trip in one day.

## Plans for reform of divorce law

By Robert Rice,  
Legal Correspondent

Quick, no-fault divorce after a year's separation was one of the options for divorce law reform outlined yesterday in a government green paper.

Launching the consultation document, Lord Mackay, the Lord Chancellor, said he was aiming for a system which was "better at identifying saveable marriages".

Couples should be encouraged to face the consequences of divorce before ending their marriages. But where divorce was unavoidable the system should minimise the bitterness and conflict between parties and reduce the trauma for children, he said.

About 75 per cent of the 150,000 divorces a year in England and Wales are granted for adultery or unreasonable behaviour.

The green paper suggests a one-year "cooling off" period before divorce can be granted on these grounds - at the moment this period is three or six months.

The paper also canvasses greater use of family mediation to avoid recourse to the courts. The government has concluded that making mediation compulsory before divorce would be impractical but it says there is plenty of scope for extending its use.

There could be compulsory "first port of call" interviews with mediators, for example.

## Insurers review pollution cover

By Richard Lapper

A legal decision later this week could accelerate the withdrawal of all insurance cover for pollution, leaving British industry potentially unprotected against multi-million pound losses.

Insurers are considering the removal of cover for "sudden and accidental" pollution - caused by spills of chemicals or the release of toxic fumes, for example - and could move quickly if the House of Lords rules against them in a landmark case involving Eastern Counties Leather, a leather tannery, and Cambridge Water.

The ABI introduced new wordings for public liability policies excluding coverage for "gradual" pollution in 1991. Insurers are now concerned to reduce coverage further as a result of legal uncertainty as to who should pay clean-up costs.

"We are looking to see whether any pollution cover can realistically be provided," conceded Mr Tony Baker, head of public affairs at the Association of British Insurers.

The House of Lords ruling, which is expected on Thursday, is viewed as particularly significant by insurers because an appeal court verdict last year "moved the goalposts" in

environmental liability cases, according to Mr Paul Taylor, of Berryman, the solicitors representing ECL and its insurers, General Accident.

Cambridge Water Company originally sued ECL after it was forced to abandon a borehole at Sawston, Cambridgeshire, following the discovery of concentrations in ground water of perchloroethylene (PCEs), a dry-cleaning fluid used by the tannery to degrease animal pelts.

Awarding more than £1m in damages and costs to Cambridge Water, the appeal court judges found ECL was not negligent, but liable in "nuisance"

- a legal concept under which it is not necessary to prove any fault to show liability.

"Hundreds of companies who dumped their goods on waste ground 20 to 30 years ago could now find themselves strictly liable," he claimed.

"It is obvious that if there is no cover some companies could be hit so hard by a claim they could be driven under," he added. Mr Baker said it was likely pollution cover would be excluded from all public liability policies "within three years regardless of what happens" but a decision in favour of Cambridge Water "will hasten the decision".

## Building societies cut mortgage rate

By Alison Smith

The Halifax, the UK's largest building society, yesterday announced a cut in its base mortgage rate by 0.35 per cent to 7.64 per cent, but issued a warning that further reductions might be limited if the government sought to compete unfairly for savings.

The cut comes in response to the pre-Budget 0.5 per cent base interest rate reduction. It also reflects relief among mortgage lenders that the Budget eroded rather than abolished mortgage tax relief, in a way seen as unlikely to damage the housing market.

The Cheltenham & Gloucester, the sixth largest society, swiftly followed the Halifax move and similarly cut its mortgage rate by 0.35 per cent from 7.99 per cent. Other mortgage lenders are expected to announce rate reductions later this week.

Societies have faced fierce competition this year both for mortgages, where banks' fixed rates have proved popular, and for savings, where investors have been attracted by other forms, such as unit trusts.

Yesterday's reductions mean a drop of £11.75 a month for a £60,000 repayment mortgage. They will apply to new borrowers immediately and to existing borrowers from January.

Mr Mike Blackburn, chief executive of the Halifax, signalled that if the government made National Savings products too attractive, then it could face a dispute with the societies, which have to rely largely on retail funds from individual savers.

"For investors, we are conscious of the impact of falling rates and concerned at the prospect of subsidised National Savings competition which might limit future mortgage rate cuts," Mr Blackburn said.

## Scots electronics industry warning

By James Buxton,  
Scottish Correspondent

The Scottish electronics industry has been warned that the number of people it employs, currently 45,000, could fall by 40 per cent to only 27,000 as early as 1997.

A report by the US consultants Monitor describes the industry as "structurally weak", "poorly integrated" and "misaligned".

Yesterday, senior industry figures launched the Scottish Electronics Forum, aimed at tackling its weaknesses and uniting for the first time the multinational companies which have plants in Scotland, and indigenous Scottish electronics companies.

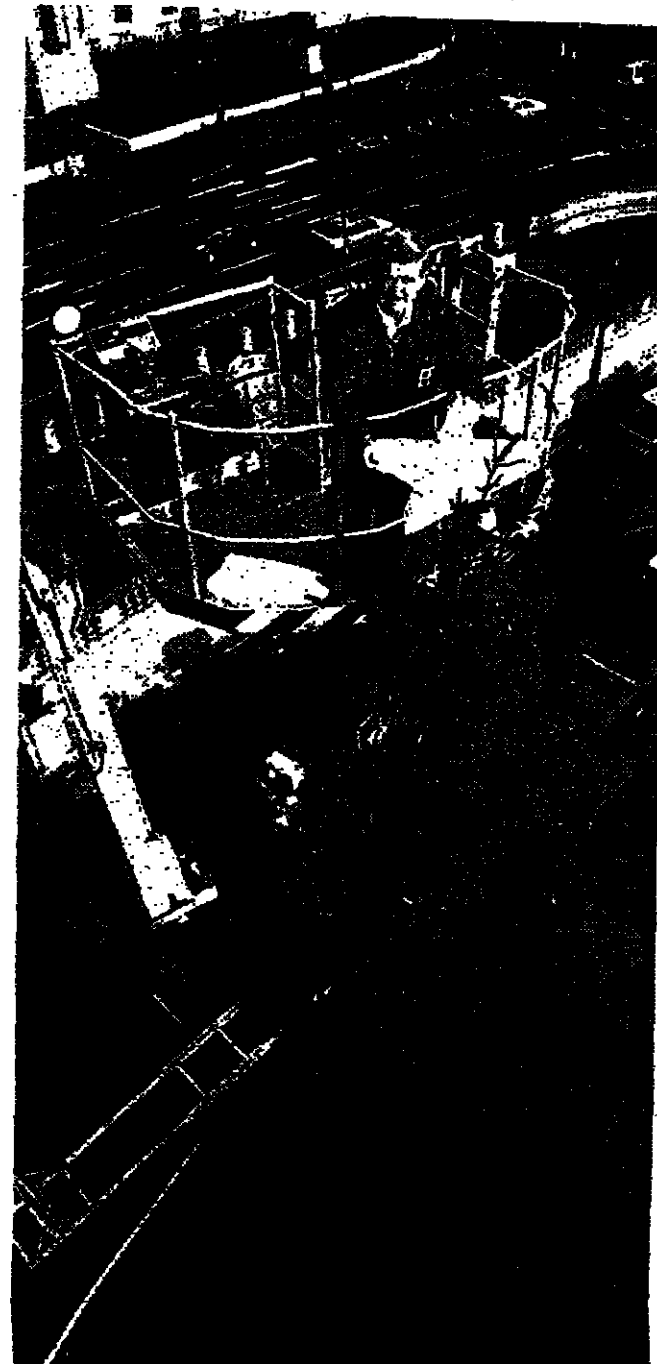
The Scottish electronics industry accounts for 40 per cent of Scotland's exports.

About 35 per cent of all personal computers and workstations that are made in

Europe come from Scotland. Scotland has IBM's personal computer plant at Greenock. The US company Motorola has both a semiconductor plant and a fast growing mobile telephone plant.

Yet as Mr John Ward, IBM's resident director in Scotland and chairman of the forum pointed out yesterday, the industry is heavily oriented towards production, which accounts for 70 per cent of output. Only 6 per cent of employees are in research and development, mostly in the defence sector - and 3 per cent are in marketing.

The Monitor report, commissioned by Scottish Enterprise, the development body, says the industry is misaligned partly because of its dependence on production when the global trend is towards software production, while miniaturisation and greater on-chip integration threaten traditional assembly.



The star is fixed on the top of Trafalgar Square's Christmas tree - a 75ft Norway Spruce - in the centre of London yesterday. The tree is an annual gift from the people of the Norwegian capital Oslo in gratitude after the city's liberation by the allies in 1945

## Awards highlight good and bad words

By Diane Summers,  
Marketing Correspondent

When is a bed not a bed? The answer, as outlined in a circular from the value-for-money unit of the National Health Service, yesterday won the NHS a prize for "gobbledygook" in the annual Plain English Campaign's awards.

A bed is only a bed when it is "a device or arrangement that may be used to permit a patient to lie down," according to the circular. Beds that fail the test are those which are used for "active intervention such as examination, diagnostic investigation, manipulative treatment, obstetric delivery or transport".

The Plain English Campaign, which collects nominations for its prizes throughout the year from members of the public, aims to "stamp out small print, jargon and other nonsense from public information".

Other gobbledygook winners included a document from the trade union Unison which takes 18 lines of memo to get round to saying that it recommends not making a recommendation, and some small print from Thorn Security rich in "hereunders" and "whereunders".

Winners of awards for clear, straightforward communication included the Inland Revenue for a leaflet aimed at encouraging people on low incomes to claim tax back on their savings. The campaign's organisers said that "in just 12 sentences, it sets out the tax position for savings, explains what action you can take and tells you how to get more information". Other winners for plain English included Help the Aged and the Employment Service.

The Financial Times won the "best national newspaper" category of the awards. Other media award-winners included ITN's News at Ten and the Birmingham Evening Mail.

## Investment vehicle proposals for consultation

By Alison Smith

The introduction into the UK of the open-ended investment company (OEIC), came a step closer yesterday as the Treasury published a consultation paper giving proposals for how the new investment vehicle could be structured.

The paper, produced after consultation with the investment industry, says that the new vehicle is needed along-

side the unit trust in order to enable UK fund managers to compete more effectively in the international market.

OEICs are common in other European countries and in North America, where investors and financial advisers are unfamiliar with unit trusts. The regulation regime for OEICs will be set by the Securities and Investments Board, the City's chief watchdog, which regulates unit trusts.

In October the SIB issued a discussion paper putting forward ways of deregulating the £84bn unit trust industry, though this did not resolve the deep divisions about the future method of pricing.

The OEIC would be bought and sold at a single price, in contrast to the current arrangements for unit trusts, where potential investors see both an "offer" price, at which they could buy units, and a

lower "bid" price at which they could sell.

The paper says that the costs to fund managers of setting up and running OEICs should not be more than for unit trusts, and emphasises that whatever the pricing of OEICs there must be clear regulations on disclosure of charges.

In order to meet the industry's demand for early action, the government plans to allow OEICs under secondary legisla-

tion, which could be dealt with early in 1995. Subject to the progress of the consultation, the tax treatment of OEICs would be covered in the 1995 finance bill.

Mr Anthony Nelson, Treasury economic secretary, said the proposals would offer investors a good standard of protection while enabling UK fund managers to compete effectively in the European single market.

## Phone technology comes down to the wire

Andrew Adonis on the ambitions of Ionica, a new telecoms player

The Mexican government has received an application to build a second national telecommunications network using radio technology developed by Ionica, the Cambridge-based company, for a new telecoms network soon to be launched in the UK.

The idea behind Ionica is as revolutionary as the mobile phone was a decade ago. Instead of miles of expensive copper wire linking exchanges with fixed phones in homes and businesses, Ionica proposes to use radio waves from a network of base stations.

Mr Nigel Playford, Ionica's founder and managing director, believes the technology will slash the cost of building and operating local phone networks, boosting competition in local phone networks which have hitherto been virtual monopolies.

The technology has strong attractions for developing countries with inadequate fixed networks, so the decision by Pulsar, the Mexican cigarette-to-insurance conglomerate founded by multi-billionaire Mr Alfonso Romo Garza, to seek a Mexican licence could be a milestone for Ionica. Ionica secured a UK licence this February, but has spent nearly three years on research and development. "Markets create services," says Mr Playford, an electronics engineer turned entrepreneur. The government's abolition of the BT/Mercury duopoly in 1991 cre-

ated the market; he intends to start exploiting it by early 1995, when the service will start rolling out region by region.

But does it work? There is some scepticism in the telecoms world. Trials in East Anglia next year will tell whether Ionica's radio quality is up to that offered by copper and fibre.

Meanwhile, imitation is flattery: Mercury, the main UK competitor to BT, recently announced its intention to trial wireless technology, with a view to a possible introduction not long after Ionica. Millicom, a US company, is also planning a radio-based service.

The Ionica service is geared to the existing market of more than 20m fixed phone subscribers. A receiving antenna, like a television aerial, will be attached to roof of each subscribing home or business. Since this is fixed, Ionica is confident it can provide a service without the quality fluctuations of mobile receivers.

"With copper-wire networks, capital investment has to be up-front: with us, most of it follows the customer," says Mr Playford. Only the base stations - each of which will serve about 1,000 customers - are "up front" at a cost equal to about £10 per home or business in its range.

While cable TV companies are spending around £5bn building networks in conurbation, Ionica plans to cover half



"Markets create services," says Nigel Playford, boss of Ionica, which is planning to use radio waves from a network of base stations

the country for about £100m by 1997, and plans to offer a national service, aiming for a foothold in the small business and residential market.

It intends to guarantee savings on BT prices and will offer features like three-way calling, voice messaging, and extra lines at low cost - each antenna link will be able to carry up to eight lines.

For larger businesses, the fact that radio-waves cannot carry heavy data and other

"broadband" services will reduce Ionica's appeal.

In creating an alternative "local loop" Ionica is targeting the least competitive part of BT's market. Even when the cable companies have completed their networks, they will cover less than half of the UK.

Ionica's radio waves will connect to BT's principal exchanges, via parallel Ionica exchanges. The trunk portion of calls will be sent over the BT network, or that of one of

its long distance competitors. In doing so, it is able to exploit the most competitive part of the UK telecoms market, the long distance networks.

But launching the service will be far from simple. Capital has to be raised to fund an unfamiliar venture. Places for the base stations have to be found. Some technical problems have to be overcome.

Ionica's backers include Northern Electric, Yorkshire

Electricity and Telecom Finland. Around £30m of £100m needed has been raised.

The company began in 1991 with Mr Playford and two others in a start-up unit on a Cambridge business park. Now it has around 150 employees, including designers from Northern Telecom, the lead contractor. Purpose-built headquarters are under construction. For all Ionica's overseas appeal, Mr Playford has no emigration plans.



# Tax plan cheers investors

RG

Struggling to contain his excitement, Growmore slipped into the office of finance director Jenny Beancounter. She was fuming at the Budget. "Six months' work getting pay rises paid by the tax payer and one flick of the chancellor's hush puppies kicks my profit-related pay scheme into touch. And Gordon, no more gold bullion bonuses this year - he closed that loophole too."

# Bring on the angels



return for a quarter of the company. The company would need help drawing up a prospectus. And there was a need for a shareholder agreement which clearly established how the angels could exit from their investment. But any agreement would have to take account of the company's tax situation.

Spotlight had raised the threshold for the 25 per cent small company corporation tax rate from £250,000 to £300,000. But Spotlight was in danger of slipping above this level and paying a marginal rate of 35 per cent. Beancounter had spent long hours with Kidsons Impey discussing how to bring tax below this 35 per cent rate.

The increasing dividend was one way. But Kidsons Impey had recently shown that Spotlight was

**"And one other thing. You do realise our earlier plans for Germany were based on the new plant we need being eligible for an enhanced first year capital allowance of 40 per cent. Your so-called champion of small business has thrown a real spanner in the works by cutting that allowance back to 25 per cent. Where does that leave us?"**

Once the ombudsman has decided that he can take up the case, then the customer will be asked to sign a waiver of confidentiality, and the ombudsman will write to both parties asking for all relevant information.

The scheme is not necessarily the answer to a small business's prayers in its dealings with a bank. Its remit is limited, and in

He added, however, that many people did not realise the scheme already extended to unincorporated businesses, and so the greater publicity from the extension of the ombudsman's role might encourage small businesses which were already covered to come forward with complaints.

**READERS ARE RECOMMENDED TO SEEK APPROPRIATE PROFESSIONAL ADVICE BEFORE ENTERING INTO COMMITMENTS**

## TASK FORCE ON ASSET SALES

*Request for Expressions of Interest  
in acquiring an interest in the*

## MOOMBA-SYDNEY GAS PIPELINE SYSTEM

In the 1993-94 Budget, the Australian Government reaffirmed its decision to sell the Moomba-Sydney Gas Pipeline System including lateral pipelines to regional centres in NSW and to the ACT. The Pipeline is currently owned and operated by the Pipeline Authority, a Commonwealth-owned statutory body. The Pipeline generates substantial revenues and could represent a key strategic asset in the future with scope for considerable further development. The Government aims to conclude the sale by 30 June 1994.

Expressions of interest from parties who wish to consider acquiring up to a 49% interest in the Pipeline are currently being sought.

Completion of the sale will be subject to an acceptable price being achieved and appropriate arrangements being put in place regarding the future operations and ownership structure of the Pipeline. A conditional agreement between the Australian Government and the Australian Gas Light Company (AGL) has been concluded for the sale of a 51% ownership interest in the Pipeline with the remaining 49% being offered by tender sale.

Key conditions of the sale include the agreement to a new gas transportation arrangement which will replace the existing arrangements between the Pipeline Authority and AGL, to be approved by the NSW Gas Council. Approval of this new agreement and the overall ownership structure by the Trade Practices Commission will also be required.

Parties from within Australia or overseas who wish to consider acquiring a substantial part or all of the available 49% in the Pipeline are invited to apply. The sale will be handled on behalf of the Commonwealth by the Task Force on Asset Sales B. Enquiries should be directed to the Chairman of Task Force B, Mr R. Smith, on + (61 6) 263 3591 or the Deputy Chairman, Mr S. Lewis, on + (61 6) 263 3613.

Expressions of interest should outline the legal status of the interested party, including ownership structure, copies of the party's last three annual reports, together with details concerning the nature and extent of their interest. Parties short-listed on the basis of the above information will, subject to the execution of a suitable Confidentiality Agreement, be provided with a detailed Information Memorandum before and after December.

Expressions of interest are required to be lodged by 4 pm on Tuesday, 21 December 1993 with:

The Chairman  
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## The Morris Singer Foundry Limited

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- Business established since 1848
- Presently located at leasehold premises in Hampshire
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For further information please contact Eddie Blackwell or David Clements, Stoy Hayward, Bowman House, 27/10 Bridge Street, Reading, Berks RG1 2U. Tel: 0734 585466. Fax: 0734 567782.

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- Principal business - Manufacture of fine paper.
- Freehold Land and Buildings comprising a total area of some 36 acres.
- Turnover approximately £30 million for 15 months ended 31 March 1993.
- Full manufacturing and converting facility with an existing capacity of some 45,000 tonnes per annum.
- Majority of plant and machinery unencumbered.
- The Company owns several brand names, including Plus Fabric.

For further information, please contact Jamie Smith, Guy Hollander or Steve Keating at the address below.

63 High Street, Crawley West Sussex RH10 1BQ.  
Tel: 0293 510112. Fax: 0293 533493.

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## Petal Greetings Cards Publishers and Printers

The Joint Administrative Receivers offer for sale as a going concern the business and assets of Avant UK Ltd and Haras Finishing Ltd, respectively printers and publishers of greetings cards under the 'Petal' brand name.

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- Leasehold premises in Aylesbury and Milton Keynes
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- Wide range of finished goods
- 'Petal' brand name
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For further information contact the Joint Administrative Receiver, Mike Blake, KPMG Peat Marwick, Abbot's House, Abbey Street, Reading RG1 3BD. Telephone 0734 505555. Fax: 0734 589285

KPMG Corporate Recovery

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Mail Order Company and Housewares Distributor  
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The Joint Administrative Receivers, N G Atkinson and A R Houghton, offer for sale the business and assets of this mail order catalogue retailer, distributor of household products, and supplier to the public of prints and collectables.

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For further information, please contact Hugh Mosley or Paul Holden at the address below.

Friary Court, 65 Crutched Friars, London EC3N 2NP.  
Tel: 071 936 3000. Fax: 071 480 6881.

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## Automotive Cash and Carry First Automotive Limited

The Joint Administrative Receivers of First Automotive Limited offer for sale as a going concern the business and assets of the Canning Town operations of this trade wholesaler.

## Principal features include:

- Turnover in excess of £5 million per annum.
- Good operating profit.
- Solid customer base
- Approximately 20,000 stock lines.
- Fully computerised systems.
- Experienced staff
- 25,000 sq ft warehouse in Canning Town supplying the South East.

For further information contact the Joint Administrative Receiver, Stephen James, KPMG Peat Marwick, PO Box 730, 20 Farringdon Street, London EC4A 4PP. Telephone 071 236 8000. Fax: 071 248 1790.

KPMG Corporate Recovery

Touche Ross

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The Joint Administrative Receivers, N G Atkinson and J P Richards, offer for sale the business and assets of this designer and manufacturer of point of sale advertising material.

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For further information, please contact Matthew Robinson at the address below.

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## Ball Valve Manufacturer Derbyshire

The Joint Administrative Receivers offer for sale as a going concern the business and assets of Valflow Engineering. The company manufactures ball valves for the on and off shore oil and gas industry.

## Principal features include:

- Turnover £1.8 million
- Leasehold property 15,000 sq ft.
- Experienced workforce
- Stocks approximately £1/2 million
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For further information please contact the Joint Administrative Receiver, Myles Halley or Richard Hassel, KPMG Peat Marwick, Peat House, 1 Waterloo Way, Leicester, LE1 6LP. Tel: 0533 471122 Fax: 0533 547826.

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## PEOPLE

## AXA sends Hawken to Tokyo

Early in the new year, Jim Hawken will be on his way to Tokyo to set up a life insurance operation for AXA group. Hawken's new role comes after five years as sales and marketing manager for AXA Equity & Law and earlier experience in the 1970s setting up from scratch and then running Equity & Law's life operation in Germany.

He is spending the next month in a language laboratory learning Japanese, which he was given the similar task of setting up a new operation in Germany in the 1970s he had at least, he says, "school German" to start with.

His current move, he says, is similar in some ways to entering the highly-regulated German market, but he expects much more rapid expansion in Japan in the early years than was achieved in the German operation, partly because it will have the weight of AXA behind it.

AXA sees expansion into the Japanese domestic market as a key element in its plans to be a significant player in all the major life assurance markets.

Aged 55, Hawken expects to stay with the new company through its start-up period next year and for the first couple of years after it acquires its licence and opens for business in early 1995.

At AXA headquarters in Paris, Hawken's background in sales is seen as at least as important as his German experience, since distribution will be so critical in the success of the company.

He also has, an official says, "the right way of working that could be applied to Japanese staff" in terms of his ability to reach decisions through consensus.

He is replaced as general manager (sales and marketing) by Mitch Brown who, together with Duncan Kerr, chief actuary of AXA Equity & Law Life Assurance Society, join the board of the holding company, AXA Equity & Law.

## Departures

In a rare example of a company boss falling on his sword, PORTER CHADBURN, chief executive, Raymond Dinkin, has taken responsibility for recent poor results and announced he is resigning to make way for someone who might be able to make a better stab at things.

Pat Barrett, Porter Chadburn's non-executive chairman, said yesterday that "Ray feels that it is in the best interests of the company that this should happen. His situation is that of football team managers. When the team gets relegated, the manager tends to find another team."

Barrett said that the company's poor results over the past 18 months were the root cause of Dinkin's going. For the half-year to October 1, operating losses of £63,000 were recorded, against operating profits of £2.2m, pre-exceptional items, last time round. From a 1991 high of more than 800p, Porter Chadburn's shares have fallen to an all-time low of 15p by last week.

Among the decisions which retrospectively now seem not to have played into Dinkin's hands was the 1990 acquisition of Gola footwear, the sports shoe manufacturer. The acquisition did not meet expectations; Gola was sold in 1992.

There is no immediate successor to Dinkin, Barrett says. He hopes a new chief executive will be appointed early in 1994.

The BOOTS Company has announced that Terry Richardson, managing director of international and marketing of Boots Pharmaceuticals, is to take early retirement. Richardson, 57, was appointed a member of the group board in 1985; he is not being replaced.

Boots Pharmaceuticals has been troubled by the withdrawal in July of Mampox, its treatment for congestive heart failure; this led to a £35m charge and left a large hole in the division's drug portfolio.

Sir James Blyth, chief executive, has said the group was conducting a fundamental reappraisal of its pharmaceuticals business and no options had been ruled out. The drugs division has been widely seen as too small to be viable.

Boots Pharmaceuticals had a turnover last year of £762m and generated operating profits of £108m. Non-UK turnover was £425m, with operating profits of £56m.

## Green light at Zochonis

They are changing the family guard at Manchester's Paterson Zochonis, one of the last of Britain's overseas traders. John Zochonis, 64, great nephew of one of the two founders, has handed over the chairmanship to one of his three nephews and the family-controlled business - 43-year-old Anthony Green.

Zochonis, an Oxford graduate, joined the family business of West African merchants in 1953, shortly after the death of his father, and got his early training serving behind the counter of the company's stores in West Africa. A shy man who does not seek publicity, he has headed the firm since 1970, during which time it has changed from being an overseas retailer and wholesaler to a manufacturer, although West Africa still accounts for the bulk of the business. In 1975 he master-

minded the firm's first big diversification, the acquisition of Cussons - makers of Imperial Leather soap.

Anthony Green, the deputy chairman, joined PZ in 1976 and served in East and West Africa and South East Asia. Zochonis retires from the board, and Thomas Harrison, the company secretary, joins it.

Peter Wilson will become chairman and chief executive of Gallaher as from February 1 on the retirement of Anthony Househam. Philip Burchell, director of finance, will be appointed deputy chairman. Wilson also joins the board and executive committee of AMERICAN BRANDS, Gallaher's parent.

George Adams has been promoted to director of business development at WOOLWORTHS.

James Beery, formerly managing partner of the London office of Morrison & Foerster, has been appointed general counsel and corporate secretary of SMITHKLINE

Neil Johnson (right), who left the Engineering Employers Federation last month after a whirlwind 15 months as director-general, has wasted no time lining up a new career.

He has been appointed general secretary of the Royal Automobile Club, the motoring organisation, from February 1, in succession to Michael Limb, who is to retire the day before after 26 years with the RAC.

Johnson was expected to be in demand after leaving the EEF, but his move to the RAC comes as a surprise - many

had thought he would return to the motor industry. Before joining the EEF in the summer of 1992, Johnson was a senior executive at Rover Group, and has spent his entire working career in the industry apart from military service.

Jeffrey Rose, RAC chairman, says the organisation has been particularly fortunate in its general secretaries from the time of its first one, Claude Johnson, in 1897. Limb became general secretary in 1978, and steered the RAC through its subsequent restructuring.



# The ins and outs of buy-ins and buy-outs.

On Wednesday, December 8 the Financial Times will publish a survey on management buy-outs.

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**MOOMBA-SYDNEY GAS PIPELINE SYSTEM**

In the 1993-94 Budget, the Australian Government reaffirmed its decision to sell the Moomba-Sydney Gas Pipeline System including lateral pipelines to regional centres in NSW and to the ACT. The Pipeline is currently owned and operated by the Pipeline Authority, a Commonwealth-owned statutory body. The Pipeline generates substantial revenue and could represent a key strategic asset in the future with scope for considerable further development. The Government aims to conclude the sale by 30 June 1994.

Expressions of interest from parties who wish to consider acquiring up to a 49% interest in the Pipeline are currently being sought. Completion of the sale will be subject to an acceptable price being achieved and appropriate arrangements being put in place regarding the future operations and ownership structure of the Pipeline. A conditional agreement between the Australian Government and the Australian Gas Light Company (AGL) has been concluded for the sale of a 51% ownership interest in the Pipeline with the remaining 49% being offered by tender sale.

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**DEPARTMENT OF FINANCE**

Key conditions of the sale include the agreement to a new gas transportation arrangement which will replace the existing arrangements between the Pipeline Authority and AGL, to be approved by the NSW Gas Council. Approval of the new agreement and the overall ownership structure by the Trade Practices Commission will also be required.

Parties from within Australia or overseas who wish to consider acquiring a substantial part or all of the available 49% in the Pipeline are invited to apply. The sale will be handled on behalf of the Commonwealth by the Task Force on Asset Sales B. Enquiries should be directed to the Chairman of Task Force B, Mr R. Smith, on +[61 6] 263 3591 or the Deputy Chairman, Mr S. Lewis, on +[61 6] 263 3613.

Expressions of interest should outline the legal status of the interested party, including ownership structure, copies of the party's last three annual reports, together with details concerning the nature and extent of their interest. Parties short-listed on the basis of the above information will, subject to the execution of a suitable Confidentiality Agreement, be provided with a detailed Information Memorandum before end-December.

Expressions of interest are required to be lodged by 4 pm on Tuesday, 21 December 1993 with:

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The UK's electrical plugs may lose a pin if plans for a European standard go ahead, writes Andrew Baxter

## A shock to the system

Not everyone would associate the tumbler world of electrical accessories with controversy and acrimony but sparks are flying in the debate about the future of Europe's plugs and sockets - and the UK's big three-pin plugs in particular.

As are being ground ever sharper in a propaganda battle that in recent weeks has seen claims and counterclaims, "doom and gloom" forecasts, and dark allegations about Machiavellian tactics.

Behind it all, however, is a serious "Euro-issue" that will strike a chord with anyone who has ever moved domestic appliances across European borders, or even tried to use an electric shaver or small hair-drier in a different country.

Today, a working group of Cenelec, the European electrical standard-setting committee, meets in Brussels for the first time to discuss how a new "plug for Europe" system can be implemented.

The plug will have two round pins - a three-pin version will be available for appliances that need to be earthed - and will be much smaller, lighter and cheaper than the British plug with its rectangular pins, which was introduced in 1947.

If the system is approved by Cenelec next summer, it will eventually replace some 20 European plug and socket systems and end decades of conflicting standards.

The UK, one of 18 Cenelec member countries, would have to abandon its plug and socket standard, BS 1363, and adopt the new one. This could relatively quickly become a world standard for countries operating 230-250 volt electrical systems - most of the world apart from North America, Japan and parts of south-east Asia.

But the UK plug and socket manufacturing industry is fighting to kill the proposal. David Dossett, director of the UK's Electrical Installation Equipment Manufacturers Association (Eiema), says it could be dangerous for UK consumers (who in any case have not asked for a change), would seriously damage the UK industry, which employs 10,000 people, and could cost up to £200m to introduce.

His most vocal opponent, Simon Hossack, a Hertfordshire inventor, rejects the safety concerns and says a common European plug system could hold big benefits for UK consumers and industry. "If the proposal is defeated it could be 20 to 50 years before another attempt is made to harmonise Europe's plugs and sockets," he says.

The issue provokes strong views in the UK electrical industry, with appliance and electronic equipment manufacturers generally in favour of the proposal, but the plug and socket manufacturers and some safety experts against it.

It comes as the UK is about to introduce new safety regulations which would require appliance manufacturers to fit 13-amp plugs to their products rather than leaving the consumer to do it. This, says Hossack, could lock the UK into its current system while every other country in Europe standardises.

The Cenelec proposal is the latest of various schemes involving both flat-pin and round-pin plugs which have been suggested, voted on, and rejected, since the International Electrotechnical Commission, the worldwide standardisation organisation, first discussed the issue in 1966.

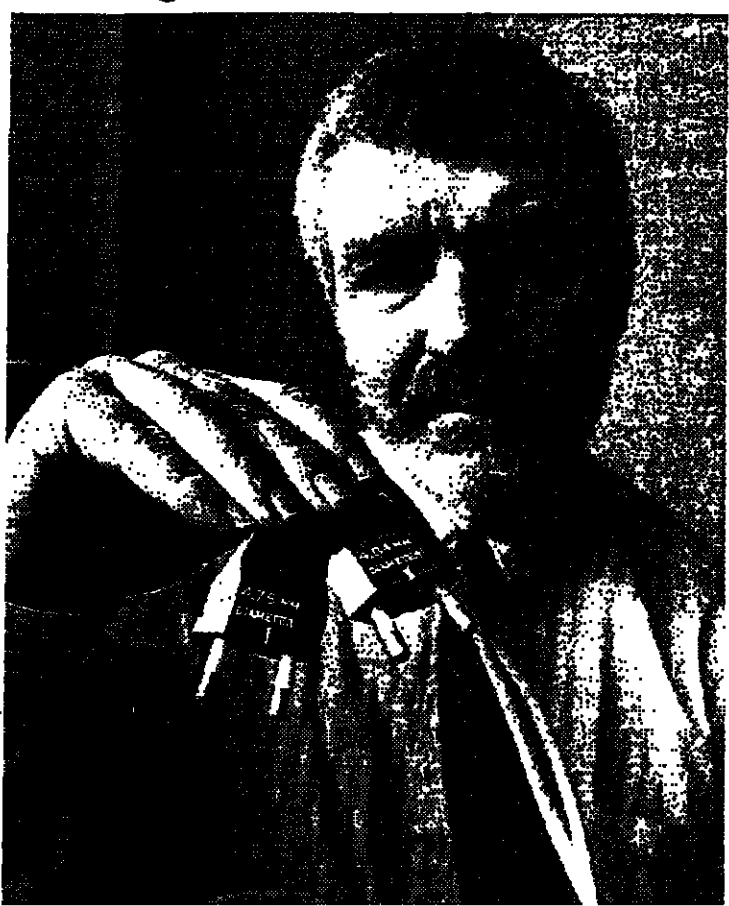
It stems directly from the controversy following a Cenelec document in 1991, *Live with the Differences*, which angered supporters of harmonisation and prompted the European Commission to demand a fresh attempt to introduce a common system.

The result is a revised version of a proposal first made in 1986 by the IEC for round-pin plugs, the so-called 906-1 system. The pins have now been widened from the original 4.5mm to 4.8mm so they can fit into most Continental systems without being "dangerously compatible", for example, with Swiss plugs.

Dossett and the UK plug industry are unhappy with Cenelec's proposals for a number of reasons:

● **Dangerous compatibility:** Dossett says an existing two-pin plug widely used in Europe for low-power appliances, the 2.5-amp two-pin "Europlug", could be inserted into a 13-amp UK three-pin socket with potentially lethal consequences. He also claims that the new Cenelec plug could, in some cases, be dangerously inserted into UK sockets. Some of these have holes wide enough for the 4.8mm pins, he says.

But opponents say two-pin plugs could not be inserted by accident into UK sockets and would require deliberate misuse by the consumer. David Latimer, a consulting engineer who is chairman of IEC and Cenelec wiring committees, says the danger is more apparent than real.



David Dossett warns of the dangers arising when two into three will go

● **Other safety and technical issues:** Eiema says the Cenelec proposal is for a 16-amp system, and passing 16 amps through a 13-amp plug would cause dangerously high temperatures, increasing the risk of fire. It also warns that the British "ring main" system requires fused plugs, while the Cenelec proposal is for unfused plugs, as used in the radial wiring networks on the Continent. This could be potentially very dangerous, it says.

Supporters of harmonisation such as Alan Smith, a technical writer and electrical expert, counter that the UK system is "over-fused". The fuse in UK plugs is not intended to give personal protection but to protect the appliance flex, he says, and to accommodate unfused plugs, a flex is fitted that can be protected by a 20-amp circuit breaker at the fuse box.

Overall, Eiema says, the UK has a "safe and technically excellent system" with which electricians and consumers alike are familiar. The Royal Society for the Prevention of Accidents even suggests that other member states of the European Union should change to "our proven, safer" system.

In reply, both Smith and Hossack point to the potential dangers caused by the arrangement of the

terminals under the UK plug cover, inefficient clamping of the flexible cable in cheaper plugs, and all sorts of injuries caused when the plug is left loose on the floor - and inevitably ends pins up.

They also claim that the UK plug is not user-friendly, especially for arthritics who have difficulty inserting and removing it from the socket, and claim the whole system has outlived its usefulness because it is not suited to modern appliance use.

● **Economic arguments:** Supporters of the Cenelec proposal reject the higher estimates quoted by Eiema, and say costs could be minimal if the system were phased in on new homes, and adaptors were used on appliances supplied with the new plug.

Hossack has invented such an adaptor, now licensed to National Power.

But the plug manufacturers do win some sympathy from Latimer on the question of manufacturing costs. Continental countries already use round pins so the UK industry faces much heavier costs switching from the milling machines used for producing rectangular pins to lathes. Dossett claims that adopting the new plugs could make half the UK industry's £1.3bn capital employed redundant.

Answers to many of these questions should come early next year with the results of a cost-benefit study being conducted by the Department of Trade and Industry.

When it comes to a vote, later in 1994, the UK could yet win with the support of Germany, which is pushing an alternative proposal, and Belgium.

Alternatively, the UK could win a derogation, allowing it to continue with the current system while the rest of Europe comes together. This would leave the UK "on the outside looking in", says Latimer, with a far weaker influence on the electrical standards-setting process.

Dossett wants Cenelec to come up with a better proposal that would address the UK industry's safety concerns. But some observers believe adoption of the proposal is inevitable, and suggest that Germany will support it because of the European Commission's strong wish for harmonisation.

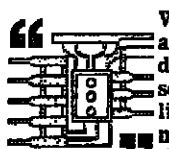
Significantly, Ireland also predominantly uses the UK's 13-amp system, yet supports the proposal. Dan O'Regan, a senior executive at the National Standards Authority of Ireland, says he does not see a problem of dangerous compatibility in Ireland.

"The changeover does not worry our manufacturers. They see a bigger market than if they continue making the BS 1363 plugs, even though competition will obviously be tougher," he adds.

### Technically Speaking

## Warm, smug and green all over

By Michael Smith



When my family and I bought our dream home in south London earlier this year we never considered the environmental responsibilities we would be taking on. We soon had to.

Our problems started when it emerged that the central heating system had all but packed up. We decided to investigate the financial and environmental implications of repairing or replacing it, and asked for advice from the National Energy Foundation. Its aim is to promote energy efficiency and it runs a National Home Energy Rating Scheme which marks homes out of one to 10. Our house scored only three.

Worse still, heating and lighting the house entailed pumping out 34.2 tonnes of carbon dioxide a year into the atmosphere. The annual cost to us of inflicting this environmental catastrophe on an unsuspecting world was gas and electricity bills of £1,820 a year. Something had to be done.

Our assessor, Vic Harrison, suggested nine areas for action, some more helpful than others. We decided, for example, to dispense with his suggestion for installing new timber softwood for double glazing.

I am all for improving the environment but I draw the line at a suggestion that this would cost £8,200 and take 222.2 years to pay for itself in saved heating costs.

Among Harrison's more useful suggestions was replacing the house's standard light bulbs with the low-energy type now available in the high street. He estimated that an initial outlay of £75 would save £22 a year; we started our energy-efficiency campaign by replacing two of them. The new bulbs are not pretty and they take a few seconds to warm up but we are getting used to them.

But the impressive savings would apparently come from replacing our old boiler with a gas condenser. This works by using a second heat exchanger to recapture most of the heat normally wasted through the flue.

Harrison reckoned its installa-

tion would move our home energy rating up from three to 4.5 at a stroke. It would take just 5.5 years for us to recoup the £2,300 cost of the boiler.

Normally the idea of finding £2,300 would have stopped us from proceeding further but, since we needed to fix the heating whatever happened, we decided to investigate. The problem is that most heating engineers and plumbers seem to have developed an aversion to gas condenser boilers, in part because of problems with installing them when they first came on to the market.

In any case, several engineers assured me that there was no condenser boiler which was large enough to fit our six-bedroom house. (I should point out that the house is run-down and does not signify large amounts of wealth of the type which make finding £2,300 easy.)

My inquiries eventually led me to the Heating and Ventilating Contractors Association which advised me that there was at least one make of boiler, Yorkpark, which would suit my house. But had I considered a smaller two-boiler system?

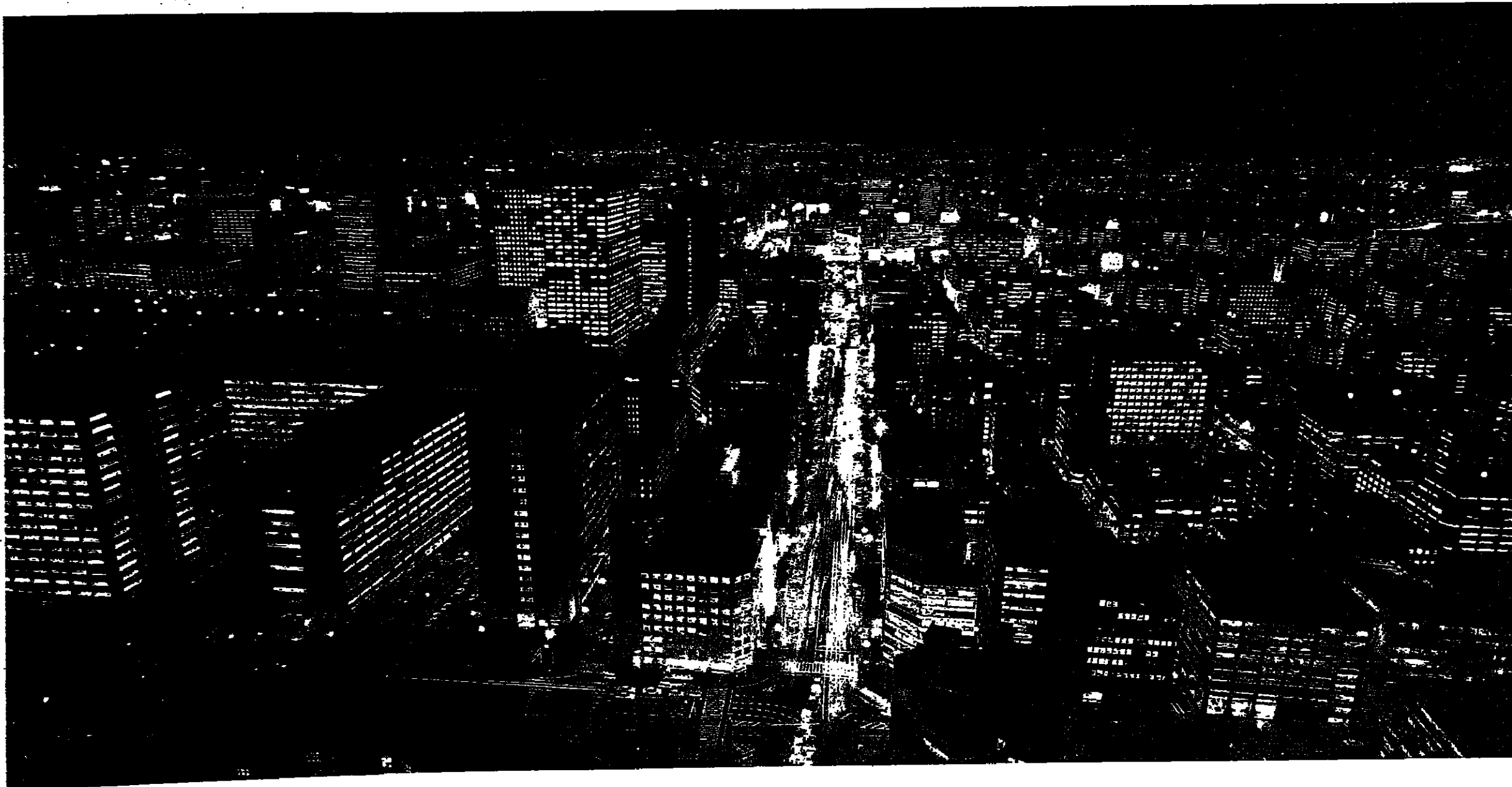
Armed with this information I eventually found two engineers willing to give me quotes, one for the Yorkpark, the other for a system using two Glow worm boilers.

Their prices? £7,200 and £6,400. The main difference between their quotes and Harrison's original estimate of £2,300 was that the current system had been so badly set up that the whole thing needed renewing, pipes and all.

The quotes also included extending the heating to the top floor of the house with four new radiators.

After days of anguished deliberation in increasingly cold surroundings, we eventually plumped for the two-boiler system which worked out at £6,200 thanks to a £200 energy-saving grant from the government.

The result is a beautifully warm house and an ever so slightly smug feeling that we have chosen the environmentally correct route. The rest of the light bulbs will have to wait.



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## Numbers can be legally protected



National rules which allow numbers to be protected as trademarks under certain specified conditions are lawful under EC law, the European Court of Justice ruled last week.

The issue arose in the context of a dispute in Germany between carmakers Audi and Renault. Since 1980, Audi has been selling four-wheel drive cars under the trademark "Quattro", which the company had registered under German law. In 1988, Renault began to sell its own four-wheel drive car, which was made in France and called the Espace "Quadra", on the German market.

Audi objected to this and Renault, in reply, submitted written applications to the German Patent Office seeking the removal of Audi's trademark protection of "Quattro".

Before any decision was taken by the German Patent Office, Audi brought further proceedings against Renault seeking an injunction against the use of the term "Quadra".

Audi claimed the two words "Quattro" and "Quadra" could be confused and that, under German trademark law, it was entitled to protect the term "Quattro".

Audi won both at first instance and on appeal. Renault then appealed to the German Supreme Court, claiming that if it was prevented from using the term "Quadra" in Germany, that would constitute an unlawful restraint of inter-state trade. The German Supreme Court referred the question to the ECJ.

The court said the absence of Community trademarks legislation when the dispute arose meant the case had to be examined exclusively in the light of the Rome treaty rules on the free movement of goods.

There were two points to decide: whether national provisions could give protection under EC law to the term "Quattro", and whether it was lawful to take into account the risk of confusion between "Quattro" and "Quadra".

The court first reiterated that under free movement of goods rules, quantitative restrictions on imports between member states

and measures of equivalent effect thereto were unlawful, except insofar as they were justified by, among other things, the protection of industrial and commercial property.

However, such restrictions could not constitute a means of arbitrary discrimination or disguised restriction on trade between member states. Given that there was no Community trademarks legislation at the time, it was for national law to determine the conditions of protection for the term "Quattro". On this issue, the court ruled that as the national law in question imposed very strict conditions on the trademark protection for a term such as "Quattro" and as there was no evidence that the law could not be used to the benefit of a non-German producer, the rules in question, which allowed the registration of a term such as "Quattro" under the particular conditions in this case, did not constitute a means of arbitrary discrimination or disguised restriction on inter-state trade.

With regard to the confusion between "Quattro" and "Quadra", the court first held that it was the specific aim of trademark law to protect the holder of a trademark from the risk of confusion.

The court then ruled that the criteria used to determine whether there was a risk of confusion between the two terms was a matter for national law. Again, it was necessary to examine whether such national provisions were compatible with Rome treaty rules on free movement of goods.

The court said there was no evidence that the national laws would breach the Rome treaty rules, and in particular found no evidence that the German authorities would apply the rules in a discriminatory manner in favour of German producers.

It thus ruled that national rules, such as those in question, which granted a right for the exclusive use of a term such as "Quattro" in order to stop the use of a term such as "Quadra" on the basis that the latter could cause confusion with the former, were lawful under EC law.

C-317/91: Deutsche Renault AG v Audi AG, ECJ FC, November 30 1993.

BRICK COURT CHAMBERS, BRUSSELS

The five-year television listings battle between British and Irish television companies and the European Commission returned to the European Court of Justice last week.

Most people could be forgiven for thinking that the dispute over the refusal by the BBC, Independent Television Publications, the publisher of TV Times, and Radio Telefís Éireann (RTE), the Irish broadcaster, to supply scheduling information to independent listings magazines was a dead issue.

In a sense it is - at least in the UK where, since the 1990 Broadcasting Act came into force, broadcasters have been required to license their schedules, in which they have copyright, to other publishers.

But the question of whether a refusal by a copyright owner to authorise third parties to publish such copyright material can amount to an abuse of a dominant position outlawed by Rome treaty competition rules is still very much a live issue. The Commission's view, upheld in 1991 by the Court of First Instance, is that it can.

If that decision was confined to the narrow issue of TV listings, it would hardly seem worth pursuing. Indeed, the BBC has dropped out, but RTE and ITP, which have been joined by Intellectual Property Owners, a Washington-based lobby organisation, are concerned by the wider implications of the CFI judgment and have appealed to the full European Court. The oral hearing was held in Luxembourg last week.

Their concern is that the Commission will use the TV listings case to force owners of intellectual property rights in other areas, such as computer software, to license those rights to third parties.

According to Mr Guy Leigh of City solicitors Theodore Goddard, which is acting for IPO, the danger is that we may be moving towards a system of compulsory licensing of intellectual property in the European Union in circumstances where the exercise of those rights is deemed by the Commission to conflict with EC competition rules.

Lawyers close to the case suggest that the CFI decision leaves it open to the Commission to act as a compulsory licensing authority in areas such as telecommunications and computer software.

In the immediate aftermath of the judgment, Sir Leon Brittan, then competition commissioner, said the Commission intended to use it to open up these markets.

But since then the Commission appears to have backed away from the idea of compulsory intellectual property licensing. According to one lawyer, there is a suggestion in Brussels that a body of opinion within the Commission legal service does not agree with the legal basis of the CFI's decision. If this is so,

## TV listings saga lives on

Robert Rice reports on a copyright issue before the European court



the Commission may see problems in trying to get any wider application of the compulsory licensing principle past the legal service, he says.

There also appears to be some confusion within the Commission as to what its precise role would be in forcing owners of intellectual property rights to license third parties to manufacture or supply protected products.

It appears prepared to order rights holders to grant licenses but then shies away from getting involved in setting the terms of those licenses. The current Commission position is that the terms of a license are a matter for negotiation between the parties involved and it will only intervene if the third party complains to it that the terms are unreasonable.

Lawyers say that is a long way from the role of a compulsory licensing authority.

The TV companies' main ground of appeal to the ECJ is that the CFI misconstrued the concept of abuse of a dominant position. It was wrong to rule that the Commission had the power to require the owner of an intellectual property right to

grant compulsory licences.

Their argument for saying this is based on the ECJ's judgment in the 1988 Volvo spare parts case, where the court said that the exercise by the owner of intellectual property rights of his exclusive right to refuse to grant a license cannot of itself amount to an abuse of a dominant position under Rome treaty competition rules.

In the Volvo case, the Swedish car manufacturer launched an action against a UK distributor of Volvo cars for breach of its registered design in spare body parts, which the distributor had imported and sold in the UK. The issue was whether Volvo could be guilty of abuse of a dominant position by refusing to license others to supply body panels even where they were willing to pay a reasonable royalty.

The ECJ said the right of an owner of a protected design to prevent others manufacturing, importing or selling products incorporating the protected design constituted "the very subject matter" of his exclusive right. It followed that an obligation imposed on the owner of the design to license others to supply products incorporating it, would

deprive the owner of the substance of his exclusive right. A refusal to grant such a license could not in itself constitute an abuse of a dominant position.

However, the court went on to say that there were circumstances where the exercise of such an exclusive right could amount to abuse of a dominant position under Rome treaty competition rules if it involved abusive conduct such as:

- the arbitrary refusal to supply parts to independent repairers;
- the fixing of prices for spare parts at an unfair level; or
- the decision no longer to make spare parts for a particular model even though many cars of that model were still in circulation.

The TV companies admit that when the case began they had a monopoly on their TV schedules and were thus dominant but, relying on Volvo, argue that their refusal to license other publishers to use their copyrighted material did not amount to an abuse caught by European competition rules.

The Commission argues that a licensing policy engaged in by a dominant company which is discriminatory or involves charging excessive royalties or is intended to drive a competitor from a market or prevent new competitors entering the market, may be an abuse of a dominant position under Rome treaty competition rules.

Its analysis of the Volvo judgment is that the TV companies' refusal to license other publishers could fall within one of the three exceptions outlined in Volvo to the general rule that a refusal to grant a license cannot of itself amount to an abuse of a dominant position and in any event that the list of exceptions outlined in Volvo was not exhaustive.

The Commission argues that Magill TV Guide, the Irish publisher which made the original complaint to Brussels in 1986 after the TV companies had sued it for publishing full listings of their schedules, was in a similar position to that of an independent car repairer who is dependent on the supply of the "raw material" from the upstream market and is competing with his supplier.

The Commission maintains that Magill was in an even more disadvantaged position, being entirely dependent on the broadcasting companies. Without a license Magill could do nothing with the supply of information on TV programmes.

According to ITP's lawyers, Allen & Overy, it is impossible to tell from last week's oral hearing which way the court will decide. The advocate general's preliminary opinion will be delivered on February 9. But it seems hard not to conclude that, if copyright owners cannot refuse to license the right and exploit it themselves, their intellectual property rights are being undermined.

## LEGAL BRIEFS



### US firms lead UK on information technology

US attorneys are at least two years ahead of large UK law firms in exploiting information technology, according to US research published in the UK by the Centre of Law, Computers and Technology at Strathclyde University. Strathclyde professors Alan Paterson and Richard Baskin say this gap could mean poorer service to UK corporate clients and less competitive UK law firms.

The greatest disparities are in the cultural dimension. US lawyers are comfortable with technology and regard IT as a strategic resource. UK lawyers remain wary of IT and regard computers as a necessary evil. The academics say the UK profession must look to the US not just for examples of what might be achieved but as a study of how competitors are carrying out their business. The UK profession will fall behind in the international marketplace unless it embraces technology, they warn.

### Asset innovation

Britain's first public securitisation of a commercial mortgage book, valued at £167m, has just been completed by City solicitors Cameron Mackay Hewitt for UCB Bank. The mortgage assets - secure loans from UCB on residential care homes and nursing homes - will be purchased from the bank by a newly-formed company, Healthcare Operators Group 1. Healthcare Operators will finance the acquisition by raising funds against the security of the assets, with any risk on the assets transferred to the issuer. Cameron Mackay says the financing structure overcomes legal, tax and regulatory problems which have prevented securitisation of commercial (as opposed to residential) mortgage assets in the past.

# HELLO ISTANBUL



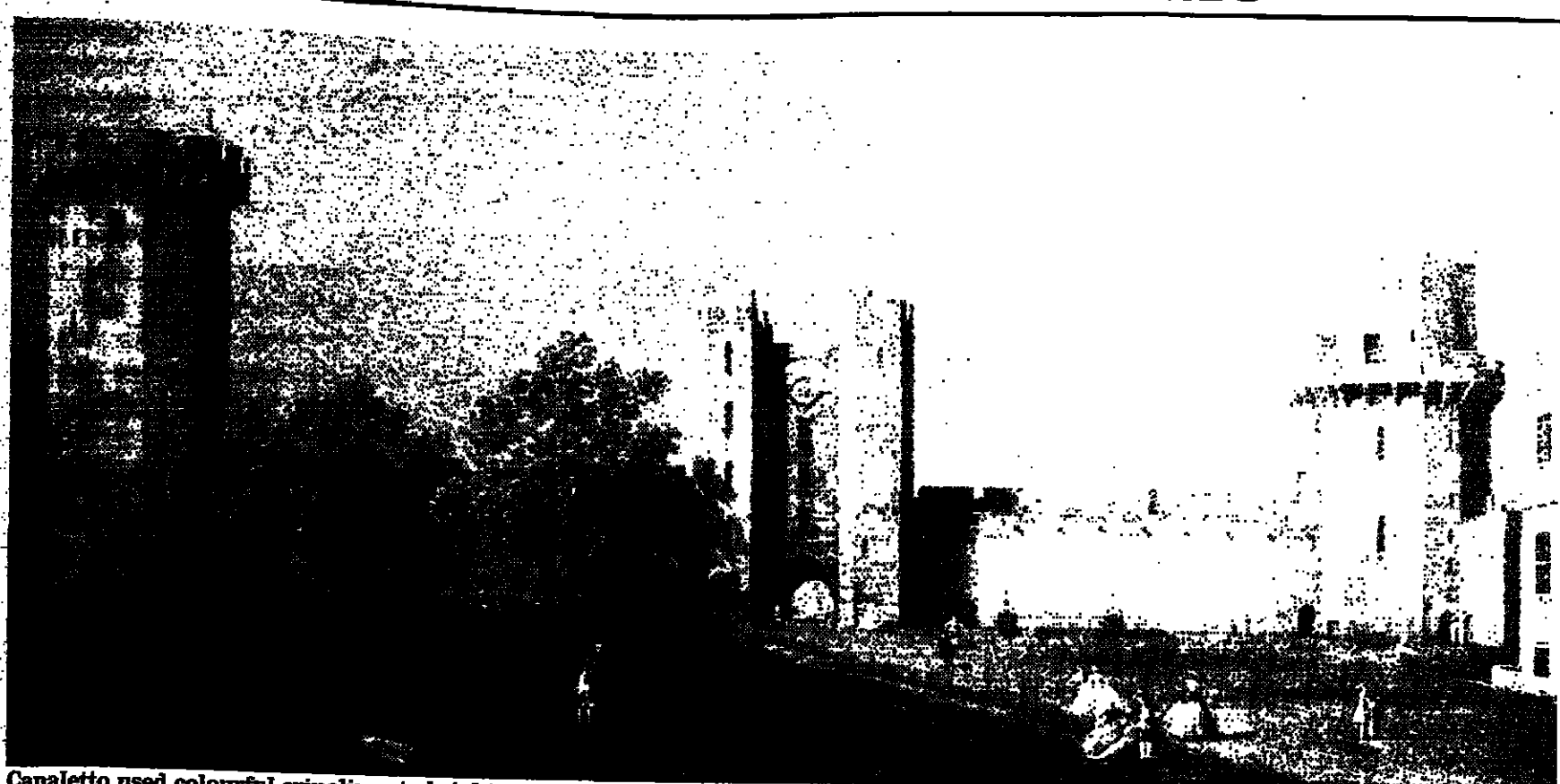
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Canaletto used colourful crinolines to brighten up his foregrounds, as seen here in 'Warwick Castle: the East Front from the Courtyard'

## Canaletto's view of the English landscape

Patricia Morison visits the inaugural exhibition in the converted Gas Hall, Birmingham

Birmingham's high profile as a city which has lavished money on the arts is, from some angles, hideous — such as the new Convention Centre and Raymond Mason's pink fibreglass sculpture outside it, my candidate for the most repellent work of public art. Happily, everyone can unite in welcoming the latest addition to Birmingham's cultural scene, the splendid Gas Hall Exhibition Gallery.

The old turn-of-the-century Gas Hall has been turned into a spacious exhibition gallery of 1000 square metres. Renovated and designed by architects Stanton Williams, the entrance way is dull, but never mind. The Edwardian interior with its triple arches and pillars, terrific for sculpture, makes an attractive and versatile space for visiting exhibitions. It cost £4m, £1.5m from the BC, £1.5m from the city, the rest from an appeal now close to its £1m target. State of the art air-conditioning means that Birmingham will be able to bid for the grandest international travelling art shows.

There could be no better house-warming than *Canaletto and England*, an exhibition which is beautiful, full of interest, and has a really good catalogue. Yet the show is not just about Canaletto, even though there are over 30 of his paintings, among them some of the best in the country and some from private collections. It is also about the influence of Canaletto on a host of artists from Samuel Scott and Rowlandson to Girtin, Bonington and Turner.

Part of the show's interest comes from deciding how fully you accept its curators'

thesis that Canaletto deserves the credit for giving English mid-18th-century topographical painting a much-needed shot in the arm. Was Pinney not quite as important, you may ask. In the end, are not the echoes of Canaletto less striking than the differences between his view of the English scene and the evolving native tradition?

Canaletto came to England in 1746. It was his first and only visit abroad, and the motive was money. George Vertue, a great source of gossip on the London art world, thought that Canaletto was attracted by the English stock market which offered "better security or better interest than abroad." However, the fundamental reason for the trip was that business in Venice was flat.

How well Canaletto deserved his fame in the 1720s and 1730s is shown by a small, well-chosen group beginning with the "Allegorical Tomb of Lord Somers". This piece of rococo theatre (rather badly lit) is on long loan to Birmingham and belongs to the speculative series of sepulchral tributes to British Worthies commissioned by the Irish impresario, MacSwiney.

For sheer magic, nothing in the exhibition can beat a pen-and-ink drawing of San Michele from the Ashmolean, every line wiggling as if the world were merely a watery reflection. Engravings of such scenes allowed the modestly rich man to have a souvenir. But the elite who made the Grand Tour simply had to have their Canaletto oil, like the pair of hot, colourful views of the Grand Canal and the Rialto Bridge bought by the Earl of Leicester.

They bought Canalettos very nearly by the yard.

By 1746, Canaletto had saturated the market with Venetian views and war had checked the tourist flow. The artist's energetic agent, Consul Joseph Smith, knew that the Whig grandees were modernising London with impressive projects such as the building of Westminster Bridge. They were pouring money into their country seats and landscaping the grounds and surely would jump at having Canaletto on hand to record their triumphs?

They did, although perhaps with not quite the eagerness expected. In eight years he sold more than 60 paintings as well as etchings and finished drawings. Yet there were low points when business was thin. Was it cause or effect that, as the exhibition clearly demonstrates, some of Canaletto's English scenes are damned dull?

It was not surprising that Canaletto had trouble in adapting to England. His unique talent was for capturing the duet between blue sky and Venice's sparkling water. England's cloudscapes, London's cobbles and mud, were not at all the same thing. Spiteful comment even suggested that he was an impostor. "The Old Horse Guards from St James's Park", bought by Sir Andrew Lloyd Webber for the astounding figure of £10.12m, is certainly large but it lacks charm. The trouble may have been that Canaletto was not trying to please anyone in particular. He simply painted the canvas and advertised it in *The Daily Advertiser*.

One of the odd features of Canaletto's

views of England is that he seems almost never to have showed horses. I spotted just one in a Canaletto drawing, although he often included dogs and urinating men. Both men and dogs had often appeared in Venetian *vedute* where as horses, of course, had not: was this one consequence of changing places to which the Venetian could not adjust?

Ladies' crinolines, however, he seized on as a way to enliven foregrounds with bold blobs of pink, white, blue, and lemon. The crinoline dodge works well in his paintings of Warwick Castle and still better in the view of the Thames from the Duke of Richmond's riverside palace. When we look at this ravishing pair from Goodwood, it seems mad to think that Canaletto was past his best.

But then, Canaletto was new to London and desperate to impress the duke, his best contact. One view he painted from an upstairs window, looking north up Whitehall at the vestiges of Tudor London, soon to be swept away. In the view from the terrace, Canaletto has the Thames as his accomplice. The water is a mesmerically beautiful lilac, with squiggles of grey suggesting the pull of the tide. The sky, of course, is that brilliant blue which tells us that in reality, the duke had bought himself a stretch of Venice-on-Thames.

Sponsored by British Gas. Exhibition runs until January 9. Meanwhile in London there are masses of Canalettos in *George III and Consul Smith* at the Queen's Gallery, Buckingham Palace, until December 23.

### Theatre/Alastair Macaulay

## 'Gypsy' shows its class

The famous 1960 musical *Gypsy* is many things. It is the Cinderella-to-celebrity biography of the stripper Gypsy Rose Lee. It is also, more importantly, an expose of the last days of American vaudeville, in which Gypsy (then Louise Horvick) received her training as a child performer. More vividly yet, it is simply a let's-get-this-show-on-the-road backstage musical — in which the show only takes flight when everyone has lost faith in it, and in a form nobody had imagined (strip-tease).

But all that could just be read as metaphor. We follow the story of *Gypsy's* early career the way we watch all ugly-duckling stories — as a parable for a child's transformation into adult maturity. The highly ironic fact that Gypsy shakes off her immaturity when she becomes a stripper adds a layer of sexual meaning to the story of growing-up: the girl becomes a woman by learning to please men, by enjoying that, and by being in control of the situation.

The brilliance of *Gypsy* lies in that it is, above all, about the girl's mother, and about the course of her maternal ambition. When *Gypsy* finally becomes a star — and

a sexual being — the show homes in on her mother's sudden frustration. Here is a classic demonstration of a parent finding herself superfluous (I gave you life, I taught you everything, I created you — how dare you be independent?) Very skillfully, *Gypsy* shows us this from both sides — mother and child.

In most respects, Jude Kelly's staging for the West Yorkshire Playhouse is first-rate. Paul Andrews's sets fluently conjure up scene upon scene of midwar America. Terry John Bates's choreography is wholly worthy of the show (which was originally directed and choreographed by Jerome Robbins). Little June's high kicks are ideally ludicrous and musical. Jane Arden and Marsha Ward, excellent as Louise and June, sing "Little Lamb." "If Mama was Married" and the old chestnut "Let me Entertain You" with complete command. Supporting roles are well taken. American accents, though imperfect, are

seldom a problem (some minor syllables get slurred into inaudibility, even by the leading performers).

Shelia Hancock takes the part of Mama Rose with splendid attack and verve. Though she lacks the blast power of Ethel Merman (the original) or even the sheer force that Tyne Daly displayed in the 1990-91 Broadway revival, she has always plenty of bite. As yet, however, her pacing is sometimes too pat, and it is too obvious too soon that her ambition is really for herself. Michael Cashman gives a wholly grey and lightweight account of her loyal stooge and lover Herbie — a role that should provide tone and ballast. (Impossible to believe in any sexual chemistry between them.) And so *Gypsy* packs less than its proper psychological punch. Even so, much of it works so well that this production should be seen. "You Gotta Get a Gimmick", one of the surefire numbers of musical theatre, is delicious.

*Gypsy* is frequently described as a great musical, which it isn't. Could a great musical end without a song, as this does? In fact, its music (by Jule Styne) is just vaudeville shock — effective, charming, undistinguished — and this very fact helps to make *Gypsy* perfect. It never lets us make this mistake of thinking "With luck, these people could be great theatrical artists." There is something humdrum about even their private life: which is what numbers like "Small World, isn't it?" catch so well.

The words, you may recall, are by Stephen Sondheim — who after this show was to grow a lot more clever and a lot less wise. Everything in *Gypsy* is about the tension between ambition and achievement. This comes to a climax in "Rose's Turn", Rose's very tricky soliloquy, in which Hancock suggests that she really might have "made it", had only things, from her birth onward, been different. The irony is tremendous. No, not a great musical, but a great show.

At the West Yorkshire Playhouse, Leeds, 0532-43111, until January 29. Sponsored by Yorkshire Bank.

### Opera in concert/David Murray

## A triumphant 'Trojans'

The first thing to be said about the Barbican concert-performance of Berlioz's opera *Les Troyens* at the weekend (in its unequal halves, the fall of Troy and Aeneas's fateful stopover at Carthage en route to Trojanising Italy), with Sir Colin Davis conducting the London Symphony and Chorus and 18 finely chosen soloists, is that they were magnificent. The second is that this memorable experience is on offer twice more: a few lucky readers will stop reading to ring the Barbican box-office (071-638-8891) NOW. For next Sunday the diptych is probably sold out, but there might just be seats for this Wednesday/Thursday.

It is a little over 24 years since Davis demonstrated conclusively, at Covent Garden, that the neglected *Trojans* was one of the few great "epic" operas. Subsequently his recording of the work swept the Western musical world, more or less, and ensured that it never goes long now without performances in one capital or another. (It seems to demand the resources of a big metropolitan company, though Scottish Opera made a recent and remarkable case for staging it with thrifty austerity.) We have been missing it in London.

By concert standards, the current Davis performances are sumptuously reinforced. Six harps for *La Prise de Troie* — chiefly to render even more radiant their strummed accompaniment for the Trojan women on the brink of mass self-annihilation; multiple offstage brass, top-calibre, to realise Berlioz's sound-visions in depth and to crowd into the hall to blow the final peroration into an overwhelming blaze. With the LSO in superb form its *lutes, trombones* and timpanist distinguished themselves, its Chorus forcefully eloquent beyond almost anything that a "naturalistic" stage-chorus could achieve, and Davis conducting out of a lifetime of paid-up addition to Berlioz, we expected no less.

What was unexpected and quite wonderful was Davis's revelatory account of *La Prise de Troie*. Hitherto its two acts have been regarded as a stark, tight-lipped prologue to the grand romantic action at Carthage. This time there was dangerous electricity in the Trojan air from the outset; and soon, with the great "Dieux protecteurs" choral scene, we found ourselves confronting a musical vista of extraordinary tragic depth, a linchpin about which all the rest revolved.

Conned by the Greeks' mock-retreat and their bequeathal of the Wooden Horse, the Trojan people sing a paean of thanks to their delivering gods. Yet we know, and Berlioz knows — and perhaps they guess — that they are already lost, that the Horse will be the engine of their doom. Their words are triumphal; but their music,

veering from bright major-key glare to darker intimations, conveys noble defiance in the face of inexorable disaster. Davis spelled it out to profound effect: in a time-less perspective of grief, but with a brazen panoply of barbaric splendour. For an hour and a half, this imagined Archaic world seized our imaginations and wrenched them hard.

Sir Colin has persuaded us long since that *Les Troyens à Carthage*, where Aeneas loves Queen Dido and cruelly leaves her, is a heart-stirring masterpiece. That might have left his new principal singers just to fill their slots as dutifully as possible; in fact they all did much more. In Aeneas's recklessly high-flying music, Vladimir Bogachov went from strength to strength. Long passages of strenuously bright, clarion tone in *La Prise*... such as only a young tenor heedless of his future could risk (exactly what the role demands — there is no safe substitute).

Toward the end of *Carthage*, Bogachov nevertheless tapped new reserves of power, raising a brave, well-studied performance (plainly after the peerless but huskier Jon Vickers) to a level of searing directness. Much the same happened with his Dido, Mariella Hatziano, Cardiff's 1983 "Singer of the World". Cultivated warmth and inviolable dignity from the start, despite some slippery pitch; later, she expanded into grand, scathing focus when Dido finds herself forsaken and ruined.

In *La Prise*... Jane Henschel's ripe Cassandra had done no less, growing into the stature of ignored, clairvoyant prophetess even while let down by her patchy French. (Though nobody listens, what she has to say is of the utmost importance.) As Dido's sister Anna, Maria Popescu boasted not only a svelte, penetrating contralto, but turns bubbly-sweet, not to mention the seasonal advantage of being born in Montreal; more than anyone, she brought all her words to spontaneous life.

Among the minor principals there are no weak links. Young Ian Bostridge (who made a strange, memorable impression as Young Sailor and Shepherd in the recent Welser-Möst/LPO *Tristan*) again brings something artfully raw and touching to Hylas's haunted lullaby, and Gregory Cross makes nearly as much of the poet Iphigeneia. From James, Alan Ewing and Brian Bannatyne-Scott, not to mention the seasoned Gwynne Howell, Robert Lloyd and Carlos Alvarez, supply vital sketches of lesser roles. Everything is held together in Davis's far-sighted, purposeful grip; these days, Berlioz has no champion like him.

Later performances: December 8/9 and both halves together on the 12th, sponsored by the Peter Styvesant Foundation and the Sema Group

### Obituary

## Frank Zappa

Frank Zappa, the guitarist and composer, has died in Los Angeles, aged 52, from prostate cancer. Born in Baltimore, Maryland, he grew up in southern California, attending the same high school as Captain Beefheart, aka Don Van Vliet. His musical career began, legend has it, through a need to pay fines for his involvement in making porn films. For the record, he began by co-writing low-budget Western film scores with Beefheart while playing white soul music in bars. By the mid 1960s Zappa's prodigious talent for the electric guitar, lyrical inventiveness and compositional energy was recognised and the first of some 70 disparate albums was recorded.

With his ever-changing band, The Mothers of Invention, and records with titles like "Burnt Weeny Sandwich", Zappa's crazed collage of jazz improvisation, doo-wop and fierce electric guitar rock heroics made him an underground hero. In 1970, increasing interest in major compositional works brought about the first of many classical collaborations, 200 Motels with the Los Angeles Philharmonic. Later joint ventures included three volumes with the London Symphony Orchestra baroque trio

recording of the music of Francesco Zappa (circa 1768) and, most importantly, "The Perfect Stranger" with Pierre Boulez and his ensemble Intercontemporain.

But it is the slickly produced and cruelly executed misanthropic rock anthems of the 1970s and '80s for which Zappa is chiefly remembered: songs populated by pervers ("The Detroit Enema Bandit") and Middle American obsessions ("Jesus Thinks You're a Jerk"), with lyrics intoned by a deadpan Zappa and terrifying solos delivered by stunt sidemen in beautifully arranged composition.

As well as these scabrous musical observations, he will also be remembered for a contrary code of ethics which brought him simultaneously into conflict with the US establishment (over censorship), with hippiedom (over his contempt for drug culture), and with Cold War eastern bloc governments (over his funding of alternative art there).

Zappa is survived by his son Dweezil and daughter Moon Unit, who are both rock musicians.

Garry Booth

## INTERNATIONAL ARTS GUIDE

### AMSTERDAM

Concertgebouw Mariss Jansons conducts the Royal Concertgebouw Orchestra tomorrow and Thurs in works by Beethoven, Grieg and Wagner, with piano soloist Bella Davidovich. Other highlights over the coming week include a performance of Bruckner's Eighth Symphony on Sat afternoon conducted by Günter Wand, recitals by the Broekmans and Orlandi Quartet, a piano recital by Grigori Sokolov and three concerts by Netherlands Chamber Orchestra. Martha Argerich plays Beethoven's Second Piano Concerto next Wed and Thurs (24-hour information service 020-675 4411 ticket reservations 020-671 8345) Muziektheater Netherlands Opera presents nine performances of *La traviata* between tonight and Dec 30, staged by Alfred Kirchner and decorated by Graeme Jenkins, with Deborah Riedel as Violetta. Dutch National Ballet's Christmas production is the Ashton staging of Prokofiev's *Cinderella*, opening

Dec 14 (020-625 5455)

### ANTWERP

Paul Goodwin conducts Academy of Ancient Music next Mon at deSingel in a performance of Monteverdi's *Vespers* (03-248 3800). Robert Carsten's new Flanders Opera production of *La bohème* opens next Tues for six performances, with Mary Mills as Mimì (03-233 6685)

### BASLE

Music by Israeli composer Mark Kopelman (b1929 near Moscow) is included in tonight's Basle Symphony Orchestra concert at the Stadtcasino, featuring viola soloist Tabea Zimmermann. The conductor is David Shalfon (061-272 1176)

This month's repertory at Basle Theater includes *Nutcracker*, *Tosca*, *Bohème* and a new production of Rossini's *Il viaggio a Reims*, opening Dec 19 (061-295 1133)

### BRUSSELS

Lunatheater Rosas dance troupe opens a week of performances tomorrow with Anne Teresa De Keersmaeker's *Mikrokosmos*, music by Bartok and Ligeti. Daily except Sun and Mon till Dec 18 (02-218 1211) Theatre Varia Stravinsky's *The Soldier's Tale* opens on Thurs in a staging by Philippe Sireuil conducted by Dirk Bok. Daily

except Mon till Dec 18 (02-218 1211)

Monnaie A staging of Schumann's *Manfred*, conducted by Olaf Henzold, opens on Thurs with Manfred Karge in the title role. Daily except Mon till Dec 15 (02-218 1211)

### CHICAGO

CHICAGO SYMPHONY Pierre Boulez conducts this week's concert at Orchestra Hall. Tonight: Bartok's *Bluebeard's Castle* with Jessye Norman. Thurs, Fri, Sat and next Tues: Bartok and Ravel, with piano soloist Krystian Zimerman (312-435 6666)

CHICAGO LYRIC OPERA Zubin Mehta conducts August Everding's new production of *Die Walküre* on Dec 10, 14, 18 and 22, with a cast led by Eva Marton, James Morris, Siegfried Jerusalem and Tina Kiberg. It revolves around Sat with a cast including Chris Merritt, Lyuba Kazarnovskaya, Dolora Zajack and Paolo Gavanelli. Repeated Dec 15, 19, 21, Jan 3, 7, 11, 15, 19, 22 (312-332 2244)

### GENEVA

The Christmas production at the Grand Théâtre is Benno Besson's staging of *Die Zauberflöte*, conducted by Armin Jordan, with alternating casts including René Pape, Simon Keenlyside, Kurt Streit and Donna Brown. Daily from Dec 14 to Dec 28, except Dec 19, 24 and 25 (02-811 2311)

### THE HAGUE

Günther Herbig conducts Hague

Philharmonic Orchestra in works by Grieg and Bruckner on Thurs, Fri and Sun afternoon at Dr Anton Philipszaal. Next Mon: Hartmut Haenchen conducts Netherlands Chamber Orchestra in Wagner, *Reinecke* and Strauss (070-360 9810)

### VIENNA

Staatsoper Tonight: *Ariadne auf Naxos* with Waltraud Meier, Barbara Kilduff and Luana DeVoi. Tomorrow: Fidelio with Gwyneth Jones and Thomas Moser. Thurs: *Die Zauberflöte*. Fri and next Mon: Maria Stuarda with Agnes Baltsa and Lucia Aliberti. Sat: *La traviata* with Nancy Gustafson. Sun: *Nutcracker*. Dec 20: first night of new production of *Les Contes d'Hoffmann* starring Domingo (51444 2955)

Musikverein Tonight, Fri: Küch Quartet plays string quartets by Haydn, Franck and Bartok. Tomorrow: Beethoven concert with Ukrainian National Philharmonic Orchestra and Chorus. Thurs: Prague Chamber Orchestra with piano soloist Cristina Ortiz. Sat and Sun: Seiji Ozawa conducts Boston Symphony Orchestra. Sat and Sun (Brahm's *Saal*): Edith Wiens song recital (505 8190)

Konzerthaus Tonight: Beethoven Trio plays piano trios by Schell and Mendelssohn. Tomorrow: Gard Albrecht conducts Czech Philharmonic Orchestra in works by Gideon Klein, Mozart and Dvorak, with horn soloist Zdenek Tyšar. Tomorrow (Mozart *Saal*): Andreas Schiff and Heinz Holliger chamber music evening. Thurs: Bach's Christmas Oratorio. Fri: Arditi

Quartet plays Schoenberg. Sat, Sun: Georges Pretre conducts Vienna Symphony Orchestra and Chorus in sacred works by Mozart and Bruckner. Mon: Sándor Végh conducts Camerata Academica in Mozart and Schubert. Dec 19: Roger Norrington conducts Berlioz (712 1211)

### THEATRE

This month's highlight is Ruth Berghaus's new production of Brecht's *The Caucasian Chalk Circle*, opening at the Burgtheater on Dec 18 (51444 2218). Repertory at the Akademietheater includes the Austrian premiere of David Mamet's *Oleanna* (51444 2959). Raimund Theater has the German-language premiere of *Kiss of the Spider Woman*, daily except Mon (Wien-Ticket 5885)

### WASHINGTON

DANCE/CONCERTS Joffrey Ballet is in residence at Kennedy Center Opera House from tomorrow till 19 with Robert Joffrey's staging of *The Nutcracker* (202-467 4600)

André Previn conducts National Symphony Orchestra at Kennedy Center Concert Hall on Thurs, Fri and Sat in works by Brahms, Haydn and Elgar (202-467 4600)

Vienna Boys Choir gives a concert next Mon at Baltimore's Joseph Meyerhoff Symphony Hall (410-783 8100)

### THEATRE

Dancing at Lughnassa: Brian Friel's memory play about five Catholic sisters in Donegal. Till Jan 2 at Kreeger Theater (202-488 4377)

Season's Greetings: Alan Ayckbourn's biting comedy about Christmas, directed by Daniel DeRaey. Till Dec 19 at Round House Theatre (301-217 3300)

Fences: August Wilson's Pulitzer Prize-winning play about a former baseball player's struggle to scale life's barriers. Till Dec 19 at Center Stage (410-332 0323)

Rollin' tribute to the period of black vaudeville, with stories, songs, dances and sketches from works by Langston Hughes and others. Till Dec 18 at Source Theater (202-462 1073)

Alice in Wonderland: the Kennedy Center's new stage production of Lewis Carroll's classic fantasy for children. Till Jan 2 (202-467 4600)

Cats: the Andrew Lloyd Webber musical directed by Trevor Nunn. Till Jan 8 at National Theater (202-628 6161)

### ZURICH

Opernhaus Tomorrow, Fri: Bernd Blenert's production of *Nutcracker*. Thurs, Sat: Salome with Inga Nielsen/Carmen Reppel. Sun, next Wed and Sun: *Der Rosenkavalier* (01-262 0909) Tonhalle Tomorrow, Fri: Emmanuel Krivine conducts Tonhalle Orchestra in works by Mozart and Brahms, with violin soloist Olivier Charlier. Thurs: Hakan Hardenberger is trumpet soloist with Camerata Bern, music by Albinoni, Pergolesi and others. Sun: Edmond de Stoutz conducts Zurich Chamber Orchestra in Boccherini, Beethoven and Spontini, with violin soloist Ulf Hoelscher (01-261 1600)

### ARTS GUIDE

Monday: Berlin, New York and Paris. Tuesday: Austria, Belgium, Netherlands, Switzerland, Chicago, Washington. Wednesday: France, Germany, Scandinavia. Thursday: Italy, Spain, Athens, London, Prague. Friday: Exhibitions Guide.

European Cable and Satellite Business TV (Central European Time)

MONDAY TO FRIDAY

Super Channel: European Business Today 2230; repeated 0530, 0715

MONDAY

Super Channel: FT Reports 1230

TUESDAY

Super Channel: West of Moscow 1230

Euronews: FT Reports 0745, 1315, 1545, 1845, 2345

WEDNESDAY

Super Channel: FT Reports 1230

THURSDAY

Super Channel: West of Moscow 1230; FT Reports 2130

Euronews 0745, 1315, 1545, 1845

FRIDAY

Super Channel: FT Reports 1230

SATURDAY

Sky News: 0330; 1330

SUNDAY

Super Channel: FT Reports 2230

Sky News: FT Reports 1730; 0430



Three-quarters of Venezuela's 23m people are under 35, yet the country has just elected a president who first ran for the office in 1947, the year after US President Bill Clinton was born.

Rafael Caldera is 78 next month and first made his mark on Venezuelan politics when Franklin Roosevelt was in the White House. In February, he is scheduled to take over a country that in the past two years has become one of the most politically volatile in Latin America.

Last year there were two attempted military coups in the continent's biggest oil-exporting country: this year, there have been three presidents, because President Carlos Andres Perez - Caldera's great political rival - was ousted in a corruption scandal.

The victory of the man who has led the "cockroach coalition" of 17 parties through the election campaign, will be felt beyond Venezuela's borders. It is the first electoral triumph of a presidential candidate in a leading Latin American economy who is explicitly opposed to the market-oriented economic reforms which have characterised much of the region since the mid-1980s. In the view of some observers, Caldera's win threatens such policies - tight budget control, privatisation programmes, the free movement of capital and lowering of tariffs.

"This election, along with other developments, shows that economic reforms have not been consolidated in Latin America," said Sebastian Edwards, chief Latin American economist at the World Bank. He cited other examples of the vulnerability of the reform impulse: President Alberto Fujimori's narrow referendum victory in Peru on October 31, and the marked popularity in Brazil of the left-wing politician "Lula" - Luis Inacio de Silva - ahead of elections in Brazil next October.

Economic liberalisation appears more deep-seated in Chile - where presidential elections on Saturday are not expected to yield big changes in policy; in Mexico, where next August's elections should result in a victory for the pro-reform government candidate, and, debatably, in Argentina, where the pro-market government of Carlos Menem has been consolidating its authority. But in most other countries there are questions about the durability of reforms.

"It's likely that Caldera will implement a number of mea-

## Golden years are tarnished

Venezuela's election raises questions about Latin American reforms, says Stephen Fidler



Venezuelan delight: a supporter of Rafael Caldera celebrates

asures that will signify a slow-down - if not a total reversal - of some of the economic reforms of the last few years," said Edwards. "I think this will provide some kind of signal to other politicians in the region."

Oil price weakness is likely to be the main constraint on Caldera if it persists into next year: oil accounts for two-thirds of Venezuela's exports and, in the face of one of the lowest tax collection rates in the world, is still a principal source of government revenue. Yet foreign exchange reserves of \$12bn, equivalent to nine months of imports, may give him a cushion to follow his populist election promises. But first, he will have to resolve differences with the ostensibly independent central bank, headed by Ruth de Krivoy. One banker in Caracas declared this year that, if Caldera became president, "Ruth de Krivoy is history". Yet Caldera said yesterday that an independent central bank was "absolutely indispensable".

If she insists on keeping monetary policy tight, high interest rates may choke off growth and imperil Caldera's so-far hazy economic policy plans. While he has been

fiercely critical of the reforms introduced by Perez, his advisers have been travelling around the world's financial centres, telling investors and bankers that many of them will stay in place.

Caldera repeated at the weekend that he would abolish the value-added tax introduced by the current interim government to help close the budget deficit which is expected to equal about 9 or 10 per cent of gross domestic product this year. He promised to replace it by a tax that falls more heavily on the wealthy. He pledged to improve tax collection. He also vowed to rid the government of inefficiency and corruption, and to cut government spending by 10 per cent, without sacking employees or cutting their salaries. He has given the impression, if not stated explicitly, that he would not raise petrol prices which are among the lowest in the world, and would slow if not halt the privatisation process.

To many market economists this has the making of failure, but Caldera does not appear impressed by now-conventional economic wisdom. Yet if he decides economic orthodoxy is the only answer to depleted

public finances, voters might feel once again that they have been double-crossed, as they did with Perez. Perez was elected on a populist platform in 1989, but on taking office saw economic reform as the only way to rescue a bankrupt state. The measures he introduced, including the abolition of food subsidies, triggered riots in February 1989 in which more than 300 people were killed.

Caldera could be in the same tight corner. Mr Anibal Romero, an academic and political opponent, said yesterday: "If Caldera does what he said he was going to do in the campaign, it's bad; and if he doesn't do it, it's also bad."

Caldera's minority support - he was elected with at most 35 per cent of the vote - could make it difficult to govern. Furthermore, while the make-up of Congress is still uncertain, some political observers fear the breaking of the old two-party system will result in a fractious and fragmented legislature in the Brazilian style. If this is so - and Caldera has said he hopes to build alliances - legislation of any kind will not be easy.

Moreover, some of the problems Caldera will face are perhaps more grave than those faced by his predecessor. The decay of the institutions of state - including the military - has not been arrested by the reforms of the Perez years. Public services have deteriorated and, said Edwards of the World Bank, the quality of education is now among the lowest in Latin America.

Caldera's main quality in tackling both economic and political issues is a reputation for integrity. If his opponents say he is a vengeful man, they also recognise his almost puritanical streak. He thus carries a moral authority absent from the administrations of Perez and Jaime Lusinchi, both enveloped in corruption allegations.

This is one reason why Venezuela's youthful population voted for him on Saturday. Another, said Moises Naim, a former industry minister in the Perez government and now a visiting fellow at the Carnegie Endowment in Washington, is nostalgia.

Caldera - described in one newspaper yesterday as Venezuela's last *caudillo* - offers a return to the golden years of the 1970s, when oil prices and Venezuelans' standard of living rose rapidly. But as the population may soon find out, trying to turning the clock back will not resolve the difficulties of the future.

## Sour milk and apple pie

Joe Rogaly



The question to ask about Gatt is not whether it will add a nice round sum in billions to world output, but what it will do for breast-feeding. The

European Union has demonstrated that it can safeguard mothers' milk. Will newborns be able to rely on the protection of the Multilateral Trade Organisation due to be set up to enforce Gatt rules if/when the Uruguay Round of trade talks ends in triumph next week?

Maybe not. Let me explain. You may recall the worldwide criticism of Nestlé, the Swiss-based food company, for its sales of infant formula in developing countries. The argument ran thus: all mothers lose their own milk very quickly when their offspring are put on the bottle. They are then obliged to buy baby milk. If the producers of bottle-feeding give it away to new mothers they capture the market. When this happens in poverty-stricken families in, say, Africa the half-starved parents face what is to them a huge bill. They take out the baby food mix they must buy. It is often over-diluted, probably with unclean water. Many babies die, either of malnutrition or infection.

To save Nestlé the trouble of facing a hot protest I gave them a call. Mr Peter Blackburn, the UK chairman and managing director, says that the company meets World Health Organisation standards on sales and packaging, and that it is working with other manufacturers, governments, the WHO and the United Nations Children's fund to phase out free supplies to maternity wards in developing countries. He can count 127 countries in which there are

either phase-out agreements now signed or where there was no free or subsidised marketing in the first place. Mr Blackburn is trying to talk the Church of England and university students out of their boycott of Nestlé's instant coffee. Fortunately at my house we mostly use grounds and a filter, so the difficult decision of whether or not to buy Nescafé has rarely been faced. Researching for this article, I found a jar of Gold Blend in our kitchen cupboard.

I suspect that Nestlé, having been given a huge fright in the 1970s, has spent the past decade in an earnest effort to shake this problem off. It is being helped by regulation, not free trade.

Thanks to the European Union the message "breast milk is best" will appear on all baby milk labels in Britain after June 1994. This will not affect Nestlé UK, which does not market the stuff here. The new regulations, available in draft form last week, disallow idealistic pictures of smiling babies on the packet. The deciding vote came in the European Parliament in April 1992. Oxfam is pleased. So am I.

Now picture the scene when the new, improved Gatt comes to rule our lives. So far as can be divined at this stage, the plan is to arrange global food standards through a United Nations body, the Codex Alimentarius commission. It will probably supersede the EU mechanism in Europe, although even now, in the final weeks of the negotiations, such details are uncertain. The Codex is run jointly by WHO and the Food and Agriculture Organisation. It is a large,

slow-moving body whose procedures may be susceptible to influence by large, fast-moving international companies.

Do not mistake me, I have not seen any evidence to the effect that the Codex is the tool of rampant, anarchic capitalists, or, for that matter, wide-eyed anti-growth greens. What we do have is an analysis of the commission's 19th session, which ran from 1989 to 1991. Its authors list the representatives who attended committee meetings in those years. Their tables indicate that while 443 non-governmental participants on national delegations represented industry, only 8 represented public interest groups. The

top 15 international food companies sent 85 delegates, 38 of them from Nestlé, 18 from Coca Cola, and others from Philip Morris (Kraft), Unilever, Pepsico and the like.

You could interpret such figures any way you choose. The company representatives may seek decent standards, in the hope that their particular industry will thus retain customers, while regulation will keep the playing field level. Against that, you might wonder whether the pressure on standards is likely to be downwards, in the short-sighted interest of immediate profits. Sensible companies will take the first view, spurred on by fear of being found out. The others will go for greed and take us to perdition with them.

The above brief exposition should convince you that the negotiations that follow the conclusion of the Uruguay Round could be more important for the well-being of the world's people than the round

itself. We live in a world in which free trade between liberal economies is assumed to be the optimum recipe for human happiness. It may be - but only if the boundaries of regulation, and public accountability, are properly drawn.

Public accountability? On some interpretations the new WTO, offspring of Gatt, could make the Brussels Commission seem reticent, not to say feeble. At least the Commission's acts are eventually unmasked. They are debated in the European Parliament. They are supervised by member governments, acting in councils of ministers. Who knows what the WTO will be able to do? Will it be the old Gatt writ large? As to democratic oversight - a motion on the order paper designating a few hours debate on international trade is guaranteed to empty the British House of Commons.

It is different in France. The French minister of foreign affairs, Mr Alain Juppe, told *Les Echos* the other day that the core issue in the Gatt negotiation is the "world trade organisation. The day after an agreement is reached... we would like to see rules in place, applicable to all, embracing new consensus, especially in the social, ecological and monetary spheres..." Anglo-Saxons may expostulate that this is typical of French statism, but such new rules will certainly be proposed in subsequent GATT negotiations. The environment, which may get only a token mention in the preamble to the WTO charter, will surely be the subject of a new round of talks. Quite right too. A Gatt deal next week may be apple pie, as conventional wisdom has it, but it is not yet motherhood.

*Cracking the Code: By Natalie Asery, Martin Drake and The Editors of National Food Alliance. 5.11 Workshop Street, London EC2A 2BB*

## LETTERS TO THE EDITOR

Number One Southwark Bridge, London SE1 9HL

Fax 071 873 5938. Letters transmitted should be clearly typed and not hand written. Please set fax for finest resolution

### SIB tackling pensions transfer problem from wrong end

Mr T S Shucksmith

Sir, The Securities and Investment Board is attacking the problem of people disadvantaged by taking transfer payments from occupational to personal pension schemes from the wrong end.

The real problem is with the cash equivalents of the deferred benefits given up. I expect parliament intended that deferred pensioners should be able to rely on transfer payments being fair and that they would not need to obtain advice on the adequacy of transfer payments offered. Cash equivalents are not defined in the legislation, a

point on which the Goode Report failed to comment. The basis of cash equivalents is decided by the scheme's actuary under professional guidance notes. According to the Institute of Actuaries one of the purposes of the guidelines is "to ensure that members of retirement benefit schemes exercising a right to a transfer value can be assured that it fairly reflects their reasonable expectation of benefits otherwise available on withdrawal".

If this purpose were fulfilled a member would not need to worry about loss of value on transferring to a personal pension plan, but merely the

choice of the best plan. However, parliament's intention and the Institute's guidance seem to have not been working. The matter is in practice a minefield and the member contemplating a transfer needs an adviser with the technical skill of an actuary, the wisdom of Socrates and the knowledge of Jove.

The problem goes much deeper than the SIB may think. Tom Shucksmith, Shucksmith & Co, Consulting Actuaries, Lincoln House, Nutley Lane, Reigate, Surrey

### Pension proposals are a good start

From Mr Mark Rittner

Sir, John Maples's pension reform proposals (Personal View, November 12) deserve a more thoughtful response than the knee-jerk defence of the status quo by Ron Amy, chairman of the National Association of Pension Funds (Letters, November 16).

John Flander has highlighted some of the problems of an unreformed system. Maples's ideas do not go far enough. The pensions industry is bedevilled by rules and regulations running to 1,600 pages, much of it unintelligible even to experienced practitioners.

The Maples reform should be completed by removing totally the limitation on the level of occupational pension that an employer can provide.

The restriction should be solely on the percentage of salary that an employer and employee can contribute to a pension fund. The levels should be set at a percentage at least as high as those avail-

able to the self-employed on an age-related basis under the personal pension rules. If the pension fund performs well, why should not the employee benefit?

One more reform is needed. Employers should also be obliged to make minimum pension contributions on behalf of all employees with more than two years' continuous employment, and they should be obliged to pay this either to an employee's scheme or to an employee's personal pension plan, if that is the wish of the employee. In this way we would begin to move towards real portability and transparency and reverse the creeping corporatism of the pension industry.

The present system, with its concentration of such vast wealth and power in the hands of very few unaccountable institutions, is the antithesis of Tory philosophy, be it wet, dry, left or right. The late Philip Chappell understood this only

too well and John Maples's proposals are very much in the spirit of Philip's ideas.

At the moment the pensions debate is bedevilled by too many corporate vested interests and too many government departments tinkering with ad hoc reforms.

Responsibility for reform must be centred in one ministry, either the Treasury or the Department of Social Security, but not both and a raft of quangos. One minister at minister of state level should be given the task of restructuring state and private pensions over the next couple of years.

All bets should be off and the aim should be for simplicity and less not more legislation and regulation. John Maples has provided an excellent start.

Mark Rittner, head of life & pensions, Rathbone Brothers, University House, Lower Grosvenor Place, London SW1W 0EX

### Euro-plug plan would be dangerous

From Mr M J Davison

Sir, In your UK News "Inventor scorns worries about cost of Euro-plug" (November 29) you quote the views of an individual called Mr Simon Hosack who, it appears, is in disagreement with the whole of the UK electrical industry and many truly independent organisations such as the Royal Society for the Prevention of Accidents.

The plain facts are: 1. The proposed harmonised standard is dangerously incompatible with the British 13 amp system, which after nearly 50 years is now installed in virtually all buildings in the UK; a system which, incidentally, is

widely recognised as probably the safest in the world.

2. British manufacturing industry would be severely disadvantaged by the adoption of the Euro proposal because, unlike the French, German, Spanish, Italians and so on, we would be faced with massive retooling and plant replacement costs.

3. The British consumer will face an astronomical bill for replacing all plugs and sockets and, in due course, wiring, or have a house full of adapters for no reason and no benefit.

Indeed, many of my colleagues who are technical experts in these matters are actively involved in numerous European and international committees pursuing worthwhile product standardisation. However, we will actively oppose harmonisation for its own sake, especially when lives and purses of British consumers can be proved to be at great risk and the employment of 20,000 UK citizens is in question.

M J Davison, managing director, MJE Electric, Shrubbery Road, Edinboro, London N9 9PB

### TGVs keep better time than stated

From Mr Jean-Pierre Leclercq

Sir, The letter from Ian MacKellar that you carried under the heading "Not really..." on November 24 contains a serious inaccuracy in the number of TGVs (Train à Grande Vitesse) arriving at their destination within 14 minutes of their scheduled time.

The figure, quoted at 74.9 per cent, is in fact 91.5 per cent for TGV Sud Est and 96.8 per cent for TGV Atlantique. And I must add for the comparison to be accurate that the SNCF runs 1,300 intercity trains daily.

The letter also implies that TGV is subsidised by the French government. This is most definitely not the case. State subsidy is more by way of a grant which is channelled into the "social railway" and not into mainline services. Jean-Pierre Loubinoux, managing director UK, French Railways, French Railways House, 179 Piccadilly, London W1V 0BA

### Levitt case shows rules have failed

From Mr Patrick McInish

Sir, I hope that your newspaper will take every step to publicise the lunacy of the outcome of the Levitt trial. What faith can anybody have in a regulatory system that appears to disregard the need to ensure that cases of this nature are examined thoroughly and fully.

Plea bargaining should not have been allowed for several reasons:

1. To ensure that the widest publicity was given to this case.
2. To ensure that all the regulatory systems could learn from the experience and understand what had gone on and how it could be avoided in the future.
3. To ensure that the people who are supposed to be protected by the regulatory system can have confidence and faith in that system.

This apparent failure by the Serious Fraud Office brings forward the day for government legislation on self-regulation is clearly not working. Patrick McInish, Keenil McInish Gibson (Financial) Ltd, Shepherds Hurst, Green Lane, Outwood, Surrey RH1 5QS

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## FINANCIAL TIMES

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Tuesday December 7 1993

## The dangers of delay

Next Monday is supposed to be a momentous day in Middle East history. Three months ago, standing on the White House lawn, the leaders of Israel and the Palestine Liberation Organisation set it as the date when they would start implementing their peace agreement. By then, they would have negotiated a detailed interim agreement for a phased withdrawal of Israeli troops from the occupied Gaza Strip and from an enclave around the West Bank town of Jericho, and for the establishment of a Palestinian self-governing authority in the areas so vacated. The first opportunity for these historic enemies to prove they could live as neighbours would be at hand, and further Israeli treaties with Jordan, Syria and Lebanon might conveniently lie around the corner.

This week's reality seems far removed from that euphoric moment. Negotiations on arrangements for Israeli withdrawal are making heavy weather, with the parties apparently far apart on such fundamental issues as the precise West Bank area from which Israel is supposed to be pulling out and the position of Jewish settlements within areas under future Palestinian control. As the danger grows that the peace timetable to which Mr Yitzhak Rabin of Israel and Mr Yasser Arafat of the PLO committed themselves on September 13 will slip, so too does the risk to the peace process as a whole.

### Detailed agreements

Already, depressingly familiar reflexes are coming to the fore. A spiral of violence in the occupied territories and in Israel proper has claimed 32 Palestinian lives and 16 Israeli ones since the peace agreement was signed. Partly as a result, support for the peace process in Israel has slipped. In the absence of tangible benefits on the ground, dissension among Palestinians in the occupied territories and within the PLO is reaching a new pitch. And a more comprehensive Middle East peace continues to move at the barely visible pace of its slowest but most important partners, Israel and Syria.

None of these developments has yet put the prospects of peace in terminal jeopardy. Israel and the PLO have managed in recent weeks to reach detailed agree-

ments on self-rule and security in the Gaza Strip, and are pressing ahead with talks on Jericho and on economic relations. Mr Warren Christopher, US Secretary of State, is in the region attempting to nudge things forward.

Nevertheless, if the Israeli-PLO timetable does slip, it will be an ominous sign. Setting a date for withdrawal of troops was itself the most important earnest of Israel's intent. Mr Rabin may argue that the really important date is not December 13 but April 13, when Israel has promised to complete its pull-out, and that he would rather have a precise and well-formulated agreement than a rushed and incomplete one. But he should know that in the Middle East, time is always a luxury. There are two particular dangers in the current delay. One is that some particularly horrific act of violence will reverse the momentum towards peace. The other is that Israel will not have a credible Palestinian negotiating partner.

### Unequal affair

This peace agreement has always been an unequal affair, with Mr Rabin negotiating from strength and Mr Arafat from a position of object weakness. Since its conclusion, however, the difficulties on the Palestinian side have multiplied. To be sure, these problems are in large part of Mr Arafat's own making: even close colleagues who support the peace deal now accuse him of bungling its aftermath by monopolising decision-making and failing to set up a sensible institutional framework for self-rule. None of this augurs well for the PLO chairman in his forthcoming guise as *de facto* governor of the West Bank and Gaza Strip.

Yet the fact remains that Mr Arafat is the only person who could have struck the Palestinian side of the Washington agreement, and is still the only leader who can keep enough of the movement together to deliver on the PLO's promises. In the next few days, both Israel and the PLO must make a redoubled effort to reach agreement in time to start at least a limited withdrawal next week. But if they fail, Mr Rabin must be ready with alternative signals that the peace process remains on course. What cannot be allowed to happen is an uncontrolled slippage.

## Breaking the power duopoly

Britain's two large electricity generators, National Power and PowerGen, have been under almost perpetual investigation since their privatisation in 1990. Now the time is approaching for Professor Stephen Littlechild, the industry's regulator, to decide whether to refer the companies to the Monopolies and Mergers Commission. He has promised to announce his decision this month.

The suspicion is that the two generators are using their market power to keep prices artificially high. Prices in the pool, the wholesale spot market for electricity, have increased sharply in the past three years.

Is the allegation of overcharging valid? According to the generators, their prices are actually too low. The pool price is still not high enough to provide a reasonable return on assets after paying for running costs and overheads. They also argue that their market share has fallen since privatisation as new players have entered the industry. Not only has state-owned Nuclear Electric increased production, but groups with links to the regional electricity companies have built gas-fired power stations. Competition, both actual and potential, puts a cap on the prices they can charge.

The generators' defence relies on the assumption that the right benchmark for prices is the "long-run" cost of producing electricity. This is the price necessary before it would be profitable to build additional generating capacity. Such a price would clearly need to provide for a return on investment and cover overheads, as well as paying for running costs.

### Massive overcapacity

Long-run costs would be a reasonable benchmark but for the fact that there is already massive overcapacity in the industry, as a result of which there will be no need for extra power stations to be built for several years. In a competitive industry with excess capacity, prices would be at or near short-run marginal cost as rivals sought to keep their plants utilised. Only as supply and demand came into balance would prices rise to the long-run level.

It was the government's intention that a competitive market should develop when it privatised

the generators. Observers hoped that the pool, which involves bidding by generators at half-hourly intervals, would encourage National Power and PowerGen to compete vigorously on price. But, in practice, the two companies have been able to increase their bid prices. This is mainly because they own all the coal-fired stations in England and Wales. These have higher running costs than the nuclear and gas-fired stations owned by competitors and so, under the complex pool system, are the last to be brought on stream as demand mounts. The two generators therefore, in effect, determine the pool price and have no incentive to set it at the short-run marginal cost.

### Retrograde step

Professor Littlechild must scrutinise the detailed financial data to which he has privileged access before deciding whether this amounts to unacceptable overcharging. If he concludes that prices are too high, he has three alternatives: price controls; voluntary disposal of power stations; and an MMC reference.

The price control option is the least attractive. Given that the market could eventually become competitive, heavy-handed regulation would be a retrograde step.

A better approach would be to tackle National Power's and PowerGen's market power head-on. This would probably mean breaking the companies up, so that a larger number of competing groups owned the coal-fired stations which set pool prices. Ideally, such a break-up would be achieved voluntarily. But given that a break-up rather than simply the sale of a handful of stations would be needed, it is unlikely the generators would agree.

That would leave an MMC referral as the likeliest way forward. Such a move would have its own drawbacks. It would be time-consuming and, arguably, premature given that privatisation is only three years old. The sale of the government's remaining 40 per cent stake in the generators would also have to be delayed. But if Prof Littlechild's investigation confirms that prices are too high and he is unable to secure a voluntary break-up, he should not shrink from making a referral.

For Chancellor Helmut Kohl, the man who brought Germany unification, it is a symbolic slap in the face to see his Christian Democratic Union pipped at the polls by the Party of Democratic Socialism, the former east German communist party.

Yet this is precisely what happened on Sunday night, when the CDU in the eastern state of Brandenburg saw itself reduced to just over 30 per cent of the vote in local elections, against more than 71 per cent for the communists.

It was not a vote against unification itself. "Absolutely not," says Mr Lothar Nicht, the Moscow-trained ex-diplomat who is party manager for the PDS in the state. "We are not opposed to unification. Of course, many of our members wanted it, but in another kind of Germany."

It was a protest vote rather, against Bonn, against high unemployment, against the insecurity of the post-communist world, and against the excessive influence of West Germany in the east. It was a protest vote against all the established parties: the opposition Social Democratic Party (SPD), which is in power in Brandenburg, itself slipped a few points, and looks set to lose the mayor's race in Potsdam, the state capital, to the PDS.

It was also, at least in part, a protest against the failure of Mr Kohl to deliver the "blooming" eastern Germany which his own party promised just three years ago. The official unemployment rate in Brandenburg exceeds 17 per cent, whilst thousands of steel workers and miners are threatened by redundancy.

For Mr Kohl, it was the culmination of a terrible 10 days in the life of his coalition with the Free Democratic Party in Bonn.

First, he saw his personal candidature for the job of federal president, Mr Steffen Heitmann, withdrawn in humiliation from the contest. He pulled out when it became clear that his conservative views and lack of public relations skills meant he would not gain a majority in the federal electoral college which will choose a president next May.

Then one week before the Brandenburg poll, the entire CDU-FDP coalition government in the neighbouring state of Saxony-Anhalt resigned over allegations that ministers imported from the west had unjustly inflated their salaries.

Finally, in a flurry of headlines and magazine cover stories, the German media have turned on the embattled chancellor to suggest that after 11 years in office, his days are numbered.

Even the died-in-the-wool conservative Frankfurter Allgemeine Zeitung (FAZ), normally a loyal supporter of the liberal-conservative

government, last week led its front page with a story comparing the state of the coalition to the dying days of the SPD-FDP regime in 1982.

It seems that the imperturbable chancellor is finally looking vulnerable. Even if he refuses to panic, his coalition colleagues and partners are showing severe signs of perceiving their impending doom. Mr Karl Feldmayer, political correspondent of the FAZ, says that the mood of defeatism within the CDU is growing. "Experienced CDU politicians will privately admit their own dependency, even resignation," he says. "They don't see any chance of winning the next federal elections."

Perhaps the Heitmann debacle was the most devastating blow of all, for it showed Mr Kohl to be fallible in the one area on which he has always prided himself as a supreme tactician: the placing of the right people in the right jobs.

Mr Kohl was sharply criticised from the back benches of his own parliamentary group when the decision was announced - and not from the liberal wing of the party, which always disliked Mr Heitmann, but from the conservatives who wanted to support him.

With no fewer than 19 elections scheduled for the next 11 months, grass-roots officials of the CDU, its Bavaria-based sister party, the Christian Social Union (CSU), and the liberal FDP are living in fear of a drubbing at the polls. "It does not really matter if this coalition collapses now, or if it drags on till next October's general election. We are still going to lose," says one gloomy local official from Lower Saxony, where the first round of state elections will be held in March.

In both elections this autumn - first in Hamburg, in September, and now in eastern Brandenburg - the CDU and FDP have trailed far behind the opposition Social Democratic Party (SPD).

Professor Kurt Biedenkopf, the CDU premier of Saxony and, it must be said, a long-standing and bitter rival of Mr Kohl, has stated publicly that he believes the SPD will emerge as the dominant party in a grand coalition with the CDU next October. He fears that the loss of only two state elections - most probably Saxony-Anhalt and Mecklenburg-Vorpom-

ern, both in east Germany - will give the SPD a two-thirds majority in the Bundestag, the upper house of the federal parliament. That would give the opposition a stranglehold on all government legislation, even if the CDU and FDP can scrape up a majority in the Bundestag.

Mr Kohl flatly and furiously disagrees. Rumours of a coalition collapse, the end of the government, and the demise of the chancellor, were "wrong three times over," he declared in a tough-talking television interview last night (mon). Nobody could foretell the results of

Quentin Peel and Judy Dempsey on the mounting political pressures facing Germany's Helmut Kohl

## Wobble atop the pillars of state



COMING: Mr Kohl's political pressures

next year's elections, not even Professor Biedenkopf, he said.

The question is whether Mr Kohl, with all his immense political experience and cunning, can reverse the downward trend in the polls when the current election arithmetic points, at best, to a grand coalition with the SPD, and at worst, outright defeat for the ruling parties.

Up till now, Mr Kohl has been in the enviable position of having no obvious rivals for his job. Within his own party he has disposed of all possible challengers such as Mr Biedenkopf, banishing them to the back benches, or the provinces.

Neither of the first two can yet be guaranteed. As for the third, Mr Kohl has only survived so long in German politics by being continually underestimated. He is unlikely to make the same mistake about the forces ranged against him.

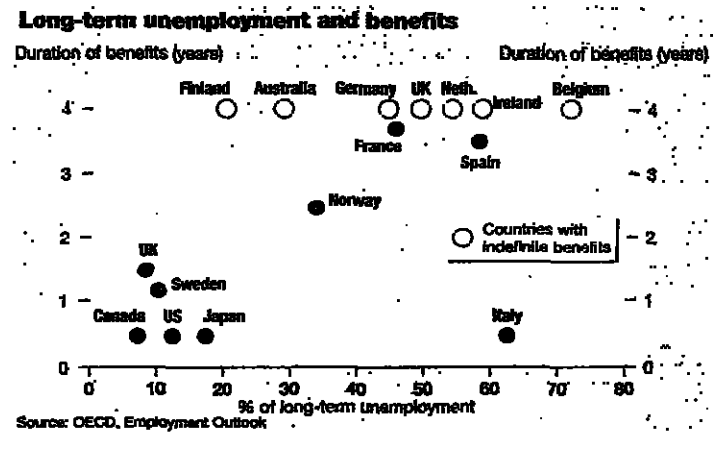
## An offer the unemployed cannot refuse

Next weekend European leaders will again discuss Mr Jacques Delors' unemployment proposals. Last time around work-sharing proposals were rejected as too pessimistic. So the search has been on for something more positive.

Unemployment can be understood only by looking at how the labour market is functioning. Above all, unemployment is profoundly affected by how people are treated.

If benefits are available indefinitely, unemployment is likely to be high. In most of the European Union benefits are available for many years, whereas in the US and Japan they end after six months. So it is not surprising that in the past 10 years long-term unemployment (of more than one year) has averaged 5 per cent of the workforce in the European Union compared with 1 per cent in the US and 4 per cent in Japan (see chart).

So one option is to cut off benefits after some interval and leave the



unemployed to sink or swim. This is the American way, but it has helped to make wages in the US twice as unequal as European wages.

The way of the underclass is not for Europe. Instead we should treat people as our chief resource and make them employable at a decent wage. This can only be done by a new approach that helps them to earn a proper standard of living.

Europe's central aim should be to prevent long-term unemployment. If employees are out of work for longer than a year, they lose skills and work habits and cease to be attractive to employers. So their unemployment does nothing to restrain inflation.

Unemployment can only be eliminated by a concerted effort over a run of years, but Europe's leaders

should now commit their countries to preventing long-term unemployment by the end of the century.

How? Here is one way. The state would guarantee temporary work (say of six months) to everybody who is still unemployed after a year. Companies and public organisations would be invited to employ such people at no cost. The state would continue to pay what it would have paid to the unemployed anyway, plus some top-up.

In return unemployed people would have to accept any reasonable offer. After the first year they could no longer draw benefits for doing nothing.

The advantages of this approach would be huge. Those in temporary work would be producing something and they would gain valuable experience. By preventing long-term unemployment Europe would be able to increase employment by at least 4 per cent. Output would go up by at least 2 per cent, and this gain would far outweigh the cost of organising the extra work.

Even governments would gain. They would collect more taxes and save substantially on benefits, at

the cost of some extra administration.

One objection to this strategy is that improving the job chances of some people would worsen those of others. But over a 10-year period employment is determined not by demand but by the number of employable people. If more people are employable, more jobs will be created. This should be the starting point for Mr Delors' proposals.

As usual, the guide to good policy is to spot the market failure and to correct it. Unemployment benefits are justified on equity grounds, but it is absurd to go on paying people to do nothing when employers would be willing to give them jobs at little extra cost to the state.

When our leaders meet at the European summit, they should concentrate on removing these absurdities.

Richard Layard

The author is professor of economics at the London School of Economics

## Mrs Volvo speaks out

■ However hard Volvo's Sören Gyll may protest that he has not betrayed his chairman, Pehr Gyllenhammar, during Volvo's ill-fated plan to merge with Renault, he is never going to satisfy Mrs Christina Gyllenhammar.

In a bitter letter in yesterday's *Copenhagen Post*, Mrs Gyllenhammar accused Gyll of using the merger issue to take over Volvo from her husband. "You realised that you could use it to get more power - not through something you built up yourself, but through using something someone else had created," she wrote.

"At no time did you turn to your chairman for his help in discussing and tackling the situation. You blew up the criticism and opposition [to the merger] which would lead to a more certain 'no' at the shareholder meeting." For good measure, she also took a swipe at "backward-looking and nostalgic" former Volvo executives, such as former chief executive Gunnar Johansson, who were prominent critics of the merger.

Her fury has more resonance than the pique of a wounded spouse. Mrs G's father, Gunnar Engellau, led Volvo from 1956 until he was succeeded by his son-in-law in 1971. In answer to the obvious question, Mrs Gyllenhammar

stressed she was not speaking for her husband but felt moved to break a 40-year vow of silence on Volvo matters for the sake of "my conscience and my family's honour".

### Blarney box

■ Granada's takeover battle for London Weekend Television looks like turning into a peculiarly Irish squabble with the sides splitting along traditional north-south lines.

The man defending the status quo, Sir Christopher Slane, chairman of the London TV company, comes originally from County Down in Northern Ireland and is a former second lieutenant with the 5th Royal Inniskilling Dragoon Guards. Meanwhile, the cross-border raider Gerry Robinson, Granada's chief executive, hails from Donegal in the Irish Republic.

### Trading places

■ Michael Heseltine is a busy man. Not content with being Britain's secretary of state for trade and industry - where he likes to be known as "president" - he is also now substitute for the foreign office's centre forward, Douglas Hurd.

Yesterday Hurd had to miss a European Union foreign ministers' meeting on Gatt in order to address Parliament on Hong Kong. Hurd's EU place was nobly taken by

## OBSERVER



'I've come to repossess your degree'

Heseltine, known as Tarzan by sections of the British media, who swung into action.

The Foreign Office denies that David Heathcote-Amory, Britain's EU minister, was thereby snubbed. "An entirely normal" switch, given Tarzan's trade interests, it says. So normal in fact that the FCO couldn't recall a previous example of it ever happening.

### Pitched out

■ What is the world coming to? First Charles Saatchi - who never bothered to attend shareholders' meetings anyway - steps down from the board of Saatchi and

Saatchi, still the world's most instantly recognised advertising agency. Then the group's holding company announces it is giving up its expensive offices in London's Berkeley Square, a move which former chief executive Robert Louis-Dreyfus tried but failed to achieve.

The annual running costs of Berkeley Square are rumoured to be about £15m, yet its contribution to overall group activity was always a little vague, apart from providing a glamorous address for Charles and Maurice and their assistants.

### Staunch salarymen

■ Akio Morita, Sony's 72-year-old chairman, has fallen ill at a particularly inopportune moment.

Until he collapsed with a brain haemorrhage last week, Morita was hotly tipped to succeed the 78-year-old Gaisai Hiraiwa as chairman of the Keidanren, Japan's powerful business federation, on Hiraiwa's retirement next year.

Bringing in the self-made electronics industry boss would have been a big change from Keidanren's traditional reliance on filling the top job with salarymen from older industries.

Hiraiwa started his career as a washing machine salesman, eventually working his way up the salaryman ladder to the top of the giant Tokyo Electric Power. Morita's straight talking, his outspoken condemnation of

protectionism and his fearless criticism of US and European management fallings all strongly contrast with Hiraiwa's courtly diplomatic style.

Nobody knows whether or not Morita will eventually recover sufficiently to be able to take the Keidanren job, but it's looking unlikely.

If he does bow out, a discreet competition can now be expected between the four runners-up: Shoichiro Toyoda, chairman of Toyota; Shoichi Saba, an adviser to Toshiba; Hiroshi Saito, chairman of Nippon Steel; and Yotaro Iida, chairman of Mitsubishi Heavy Industries - all stalwarts of the grand old schools of Japanese industry.

### Sleep tight

■ The British Association of Hotel Accountants has spent two years drawing up new guidelines for surveyors who have to value hotels - it is to be hoped - accurately.

But will it do any good? The BAH committee which drew up the guidelines includes a director of Queens Moat Houses, the heavily indebted hotel chain that commissioned two valuations last year from two different firms which came in nearly £500m apart. Who else sat on or advised the committee? Representatives from both those firms: Jones Lang Wootton and Weatherall Green & Smith.



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## INTERNATIONAL COMPANIES AND FINANCE

## Ahold advances despite setback for US earnings

By Ronald van de Krol in Amsterdam

Higher results in the Netherlands and Portugal helped Ahold, the Dutch-based food retailer, overcome lower earnings in the US to report a 9.3 per cent increase in third-quarter net profit.

Net profit rose to £173.9m (\$38.4m) in the quarter from £166.7m a year earlier, on sales up nearly 35 per cent at £1.62bn. The strong sales increase was due mainly to new consolidations and the translation effects of the higher dollar.

Ahold, whose annual sales are roughly evenly split between the US and Europe,

said operating profit in the US slipped to \$31.9m from \$37.6m, reflecting both the one-off costs of changing the format of Edwards, one of its five US supermarket chains, as well as the fierce competition facing its Finest Ohio operations.

In the Netherlands, where Ahold's Albert Heijn chain is the national leader, operating profit rose to £151.4m from £151.4m, an increase of 35.6 per cent. When corrected for the consolidation of Schuitens, a majority-owned wholesaler, and Jamin, a Dutch confectionery chain, the rise in the Netherlands is 18.6 per cent.

In other European countries, operating results swung into a profit of £115m from a loss of

£12.5m, due almost entirely to improvements in Portugal, where Ahold has expanded rapidly in recent years. The Dutch group continues to incur start-up losses in the Czech republic.

Overall, operating profit in the quarter rose by 30.5 per cent to £144.3m. Net profit increased at a lower rate because of higher financial expenses and losses linked to the new consolidations and acquisitions.

The third-quarter result takes net profit for the first nine months to £1245.3m, an 11.4 per cent increase.

Ahold repeated earlier forecasts that profit would rise in 1993 as a whole.

## Saatchi shares fall on profits doubts

By Diane Summers, Marketing Correspondent

Shares in Saatchi and Saatchi, the heavily-indebted advertising group, fell by 23p to 157p yesterday following a profits warning issued in the US.

The loss of two large accounts, worth £30m (\$44.7m) in revenue for 1994, plus pessimism about client spending, will lead to more redundancies. Severance costs of about £10m in 1993 will be in addition to the expected level of £25m, said the group.

Saatchi is to vacate its offices in Berkeley Square, in the West End of London, which will save £1.2m annually from 1994. Analysts had been forecasting pre-tax profits for 1993 of between £24m and £29m. Mr Neil Blackley, of Goldman Sachs, who had been forecasting £25m, said £19m was now more likely. The 1993 results are due in March. His forecast for 1994 is likely to be revised downwards from £42m to £35m.

Mr Blackley said yesterday: "Everyone loses business. The problem is they haven't been winning any. That's what Saatchi has not been achieving."

The 1992 results, excluding the £600m of goodwill written off by the group, showed underlying pre-tax profits of £18.9m. No dividend was paid, but Mr Charles Scott, who took over as chief executive in April, has committed the group to paying a dividend in 1994.

The two large accounts lost in the US were those of Chrysler, the motor manufacturer, and Helene Curtis, the hair-care products company.

The group has also taken soundings among its approximately 18,000 clients and is pessimistic about spending on advertising for 1994, particularly in continental Europe and in the US. Saatchi is pitching for several large accounts, including Burger King, the hamburger chain.

The warning was announced in New York at the Paine Webber media conference, attended by leading industry figures.

## Netas sale tempts foreign investors

The Turkish group hopes to raise \$60m, writes John Murray Brown

International investors are being offered a chance to bid for an 18 per cent stake in Northern Elektrik Telekomunikasyon (Netas), the Turkish telecommunications group which is part of the Northern Telecom of Canada.

The sales syndicate is being led by Kleinwort Benson, the UK merchant bank. It includes Salomon Bros, Morgan Stanley, James Capel, and UBS of Switzerland. The sale of the shareholding is expected to raise \$60m.

Telecommunications is one of Turkey's fastest growing industries. Turkey increased the number of lines by 183 per cent between 1986-91. Public and private investments in the sector are running at about \$2bn a year. Today, for every 100 Turks, 16 have access to a telephone. By 1996, this is expected to rise to about 30 per hundred.

The share sale will have a big impact on the direction of Turkey's privatisation effort. Turkey is grappling with the

problems of how to dispose of its large state-owned monopolies, with advisers due to be appointed on the sale of both Petrol Ofisi, the petroleum retail company and Tupras, the state-owned refineries group.

Netas was set up as a joint venture between PTT, Turkey's state post and telecommunications monopoly and Northern Telecom, to manufacture switches and exchanges for the national network.

The company is Turkey's largest telecommunications manufacturer. Netas accounts for more than 50 per cent of the local switchgear market, which in turn comprises 60 per cent of the company's total sales - which in 1992 totalled \$270m.

However, there is some concern at the extent to which the company is dependent on government payments for its revenue flows. About 80 per cent of earnings represent local revenues, although that proportion is falling, the company says.

Mr Tanju Argun, the Netas managing director, estimates the 1993 sales figure at \$300m, with exports accounting for \$30m. By 1996, the company expects half its revenues to come from non-government turnover, mostly exports.

The company has been in the vanguard of Turkish telecommunications expansion in central Asia. Netas installed Northern Telecom's DMS public exchange in Azerbaijan, Kazakhstan and Turkmenistan. The company has three joint ventures in the Russian Federation to manufacture the DEX rural digital switch, its own design.

Netas plans to exploit the growing market in terrestrial and cable television transmission systems, following the scrapping in June of the state television monopoly. There are now 14 channels. The only blight was when the company failed to win the PTT tender to install a GSM cellular tele-

phone network, the pan-European digital standard which will link Turkey with other European users.

The PTT split the contract, awarding it to two separate consortia, one led by Eriksson of Sweden, another by Alcatel of France.

In February, Northern Telecom paid \$26m for a 20 per cent stake in Netas formerly owned by the government, bringing its shareholding to 51 per cent. The Turkish armed forces fund retains a 15 per cent stake, while the PTT charitable foundation owns 3 per cent.

In addition, in March the government offered a further 20 per cent by initial public offering, although subscriptions were received for only 35 per cent of the issue.

Turkish brokers expect Kleinwort to price the current deal at a discount of between 5 per cent and 10 per cent to the stock market. Netas is trading at about TL45,000 compared with the March offer price of TL3,250.

## UBS to sell kinegram gold bar

By Ian Rodger in Zurich

Union Bank of Switzerland, one of the leading suppliers of small gold bars to the retail market, has launched a new line of bars designed to foil the forger and tamperer, and attract new custom to the lacklustre gold trade.

The bars feature a highly complex, multi-coloured hologram-like pattern on one face. The recently developed technology, called kinegram, is used on some banknotes and security documents and is virtually impossible to copy.

The kinegram is very sensitive to disturbance. Anyone attempting to take some of the

gold out of a small bar and substitute tungsten or another similarly dense metal would cause a distortion to the pattern that would be visible to the naked eye.

UBS said that the level of forgeries in the world retail gold bar market was still low, but it wanted to prevent it from growing.

The company also clearly wanted to give its gold bar marketing a lift. Mr Fabio Torboli, an executive of the World Gold Council participating in the launch, described the new bars as great fun. "This market needed an innovation," Mr Torboli said. He predicted that the new bars would not take away

from sales of other gold products, but would bring in new buyers.

Mr Urs Seiler, the bank's metal trade manager, said the premium charge for the new bars would average 3 per cent of the price of the underlying gold, only 0.3 per cent higher than on ordinary bars. UBS was counting on higher volumes making the development worthwhile, he said.

Initially, the kinegrams will appear on five gram, 20 gram and one ounce bars, but UBS said it intended ultimately to put them on all its bars. They will be produced at the UBS gold refinery at Mindrisio near the Italian border.

## Dutch groups in alliance talks

DSM and Gist-Brocades, the Dutch chemicals groups, said their co-operation talks were at an advanced stage and that they were expected to lead shortly to a joint venture, Reuters reports from Amsterdam.

The investigation into co-operation on an equal basis in semi-synthetic cephalosporins and new intermediates for the antibiotics segment had reached the stage where a joint venture could be expected soon, the two companies said.

## Ghidella relinquishes most of his Saurer posts

By Haig Simonian in Milan

Mr Vittorio Ghidella has stepped down from almost all his positions at Switzerland's Saurer engineering group following personal legal problems and heavy losses at a Milan subsidiary.

The decision, "for family reasons", follows Mr Ghidella's arrest earlier this year in a judicial inquiry into alleged corruption at Oto Trasm, a

south Italian engineering company in which a local subsidiary of Saurer is a shareholder.

Mr Ghidella faces charges regarding an alleged attempt to defraud Oto Trasm by transferring machinery from its Bari plant to the Turin base of Grazioni Trasmissioni, the north Italian engineering group in which Saurer has a 90 per cent stake.

He has rejected the accusations.

## NEWS DIGEST

## AGF issues warning for second half

Assurances Générales de France (AGF), the French insurance group, warns that second-half profits are likely to be below those of the first half due to the impact of the economic recession and freak weather conditions in France, writes Alice Rawsthorn from Paris.

Mr Michel Albert, chairman, said the 1993 results would definitely be less than double the outcome in the first half when it made static net profits of FF1.41bn (\$241m).

However, Mr Albert stressed that he was not overly concerned about the outcome for the full financial year. He said he was reasonably optimistic about AGF's performance in spite of the tough economic environment.

AGF, which is a candidate for privatisation and had until recently been less badly



Michel Albert: not overly concerned about the full year

Kleinwort Benson said it had placed the shares with investors in France, the UK and the US.

The placement is subject to a right to match the offer during the next 15 days from Venturini But, a family company which holds just over 50 per cent of But.

Ikisat Bankasi, the Turkish trade finance bank controlled by Mr Krol Aksoy, is planning to make an initial public offering on the Istanbul exchange, writes John Murray-Brown from Ankara.

An issue of up to 10 per cent of its share capital is being considered as Mr Aksoy looked to raise funds to finance his media businesses, Show TV and Hürriyet, Turkey's second largest national newspaper, in which he has a 25 per cent stake.

Ikisat, which is a specialist trade finance bank, reported profits of TL165bn (\$12.2m) in 1992 on assets of TL5,874bn.

The sale of a 10 per cent stake would raise about \$30m, the bank said.

Mr Aksoy owns 45 per cent of Ikisat while his family-controlled holding company owns a further 50 per cent. A consortium led by Accor,

the French hotel group, has completed a \$57m purchase of a 51 per cent stake in Pannonia, Hungary's main mid-market hotel chain, writes Nicholas Denton from Budapest.

The deal's most striking provision is that Pannonia will become Accor's vehicle for expansion in the southern tier of eastern Europe, holding the exclusive right to Accor brands such as Novotel and Sofitel.

In addition to the purchase price, Accor has undertaken that a privatised Pannonia will invest a further \$30m for renovation of the Hungarian company's portfolio of 33 hotels.

Hungary's State Property Agency, the privatisation authority which conducted the disposal of state-owned Pannonia, plans to float its residual shareholding on the Budapest stock exchange in the course of 1994.

Pannonia is the first Hungarian hotel chain to be sold in one lot to a western operator although all three main national groups were included in the country's flagship First Privatisation Programme in 1990.

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December 1993

Please refer to the notes on the reverse side of this prospectus for a full and complete description of the terms and conditions of the offering.

Year	Net Profit	Net Profit per Share	Dividend
1990	10.20	10.20	10.20
1991	10.20	10.20	10.20
1992	10.20	10.20	10.20
1993	10.20	10.20	10.20
1994	10.20	10.20	10.20
1995	10.20	10.20	10.20
1996	10.20	10.20	10.20
1997	10.20	10.20	10.20
1998	10.20	10.20	10.20
1999	10.20	10.20	10.20
2000	10.20	10.20	10.20
2001	10.20	10.20	10.20
2002	10.20	10.20	10.20
2003	10.20	10.20	10.20
2004	10.20	10.20	10.20
2005	10.20	10.20	10.20
2006	10.20	10.20	10.20
2007	10.20	10.20	10.20
2008	10.20	10.20	10.20
2009	10.20	10.20	10.20
2010	10.20	10.20	10.20

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## First nine months 1993

ING Group achieved good results for the first nine months of 1993. Net profit rose by 11.0% compared with the first nine months of 1992. Profit per share went up by 7.4% to NLG 5.50.

Total assets increased by 4.2% to NLG 337.3 billion and shareholders' equity rose by 24.7% to NLG 19.4 billion.

The results have been determined in accordance with the new accounting principles which are being applied by ING Group as of 1993.

The figures for the first nine months of 1992 have been adjusted to the new accounting principles to allow a proper comparison.

The Executive Board expects that profit per share for the whole of 1993 will show a moderate increase.

Amounts in Dutch guilders	Nine months 1993	Nine months 1992	% change
(millions)			
Result before taxation	1,916	1,717	+11.6
Net profit	1,387	1,250	+11.0
(guilders)			
Net profit per share	5.50	5.12	+7.4
	30 September 1993	31 December 1992	
(billions)			
Total assets	337.3	323.7	+4.2
Investments	127.6	128.7	-0.9
Bank lending	145.2	139.3	+4.2
Shareholders' equity	19.4	15.6	+24.7

## ING GROUP

The report for the first nine months of 1993 can be obtained at the following address:  
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# Mellon Bank sees a mutual advantage

Richard Waters looks at the background to the US bank's takeover bid for Dreyfus

There was only a limited time that US banks could have afforded to stand aside from the boom in the mutual fund business.

The twin forces of rising stock and bond markets and falling short-term interest rates have sucked cash out of bank deposits: at current growth rates, mutual fund assets will exceed bank deposits in the US before the end of the decade.

The near-\$2,000bn that Americans have in mutual funds is already roughly equal to 80 per cent of the cash they have in the bank.

Banks which have tried to break their way into the business have made rapid progress in the past year, but from a very low base.

In the middle of this year, FNC Bank and BankAmerica each had around \$20bn in assets under management, compared with \$10bn at NationsBank and \$5bn at Chase Manhattan, according to research by Lipper Analytical Services.

In all, banks account for only an estimated 8 per cent of the total mutual fund business.

Faced with such a position, a bank takeover of a mutual fund group seemed likely before long.

Most commercial banks

shares are trading at high levels after the recovery of the past year, even after the correction in bank stocks since October.

This has made it possible for banks to contemplate using their own paper to buy fund groups without facing a big earnings dilution, even at a time when the mutual fund industry is at a peak.

Even so, Mellon predicts its earnings per share growth will be held back by 9 per cent next year as a result of the acquisition.

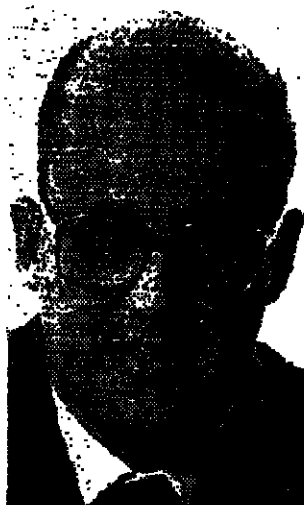
If completed, Mellon's acquisition of Dreyfus, which accounts for 4 per cent of the mutual funds business, will catapult it ahead of other banks.

It could also hasten a rush by others to buy a stake in the fund industry - though there is a shortage of publicly-held funds groups to target.

Most of the leading companies are either privately-held like Fidelity Investments, the industry leader with \$226bn under management at the end of October (up 35 per cent on a year before) or part of brokerage groups.

Merrill Lynch, with \$118bn, ranks third, behind the privately-held Vanguard Group.

This helps in part to explain Mellon's choice of Dreyfus.



Frank Cahonet: made bold move into fee-based businesses which has missed out on the mutual fund explosion over the past year.

Dreyfus made its name in the 1970s with an aggressive push into money-market funds, a bias that has remained. Around 44 per cent of its fund assets are in short-term money markets, compared with an industry norm of only some 26 per cent. As investors have rushed out of money market instruments and into long-term equity and

bond funds, Dreyfus has scrambled to catch up.

But its assets under management at the end of October had fallen to \$76.7bn from \$81.2bn a year before, according to figures compiled by the Investment Company Institute.

If US interest rates increase faster than the modest rise predicted by many market analysts for the first quarter of next year, then Dreyfus' fortunes could change quickly - and Mellon's purchase would look a lot smarter.

Mr Howard Stein, Dreyfus chairman and chief executive, has been consistently cautious about the stock market's boom.

It is a policy that was proved correct in September 1987 when, in an interview with Forbes magazine, he explained his reasons for not investing Dreyfus' own money in buying investment firms. "Everything goes full circle," he warned then.

For Mellon, meanwhile, the Dreyfus deal represents the clearest sign yet that the Pittsburgh-based bank is emerging strongly from the credit problems which threatened to engulf it at the end of the 1980s.

Under chairman Mr Frank Cahonet, Mellon has made a bold move into fee-based businesses far removed from its

traditional commercial lending base. Earlier this year, it acquired the Boston Company from Shearson, making it one of the US's largest custodians. The Dreyfus deal will take its assets under management to \$215bn.

Its reliance on net interest income will fall still further: after the deal, 62 per cent of revenues will come from fee-based businesses, Mellon says.

The Mellon move is likely to intensify the interest of regulators and other policy makers in the implications of a full-scale bank invasion of the mutual fund business.

Mr David Hale, an analyst at Kemper Financial Services in Chicago, questions whether "the US will create a new form of universal banking in which banks supply the corporate sector with equity and long-term debt financing through new mutual fund affiliates, not just their traditional lending departments".

That would throw open again the question of how the banks are regulated, and by whom - at just the time when the Clinton administration has begun a tentative initiative to unify the fragmented regulatory framework that already applies to commercial banks.

## Canadian Bronfmans sell Seagram shares

By Robert Gibbons in Montreal

THE Canadian members of the Bronfman family, through the Charles Bronfman trust, have sold 3.7m Seagram shares on the New York stock market for nearly US\$100m.

The sale reduces the trust's holding in Seagram from 62m shares to 58m shares or almost 16 per cent. Three Bronfman family trusts control Seagram, one of the world's top four drinks groups.

Mr Michel Boucher, vice-president of Claridge, the

Montreal-based holding company for the Charles Bronfman group, said the stock sale was "part of the family's financial planning".

The shares included a block of 3.28m cross-traded by Goldman Sachs yesterday. Mr Boucher said he was unaware of the buyers of the Seagram block. Seagram shares fell about 3 per cent following the block trade.

The stock sale came several days after Seagram reported a third-quarter loss of 27 US cents a share due to a 64 cents

special charge. Seagram's share of a US\$1.3bn write-down by Du Pont. Seagram holds 34.3 per cent of the chemicals giant.

In New York, Seagram spokesman Mr Chris Tofalli said the stock sale was made for personal reasons. "It happens from time to time but such sales are not that frequent."

Charles Bronfman is co-chairman of Seagram. His elder brother, Edgar, of New York, is chairman and his son, Edgar Bronfman Jr, took over as Seagram president several

years ago to reorganise the worldwide group.

Before this occurred, the New York and Montreal Bronfman family branches had made a power-sharing agreement under which they jointly controlled Seagram, but the New York family took the driving seat.

Seagram has built up a holding of 8.1 per cent in Time Warner, the entertainment giant, this year and says that it will increase this stake to 15 per cent for a total investment of US\$2bn.

## Biotech companies form strategic alliance

By Richard Tomkins in New York

CellPro and Corange, two international biotechnology companies, yesterday announced that they had entered into a strategic alliance under which Corange will pay up to \$22m for a 15 per cent stake in CellPro and rights to certain of its products.

The Bermuda-based Corange, which is the parent company of Boehringer Mannheim and De Puy, is the world's second largest producer of in-vitro diagnostic products.

CellPro, which is based in Bothwell, Washington, specialises in cell-selection systems for use in therapeutic, diagnostic and research applications.

The equity agreement provides for Corange to invest \$110m in CellPro by buying new shares in the company in

two tranches over the next 15 months. The agreement will leave it holding approximately 15 per cent of the company's equity.

Under separate agreements, Corange will acquire certain rights to therapeutic and diagnostic products being developed by CellPro in return for a signing fee of \$10m, contributions to research and development of up to \$55m, and milestone payments of up to \$45m.

One agreement will provide for CellPro and Corange jointly to develop and market stem cell-selection products for therapeutic applications outside North America, and to share profits.

A separate diagnostics licensing agreement provides for Corange to acquire exclusive, world-wide rights to diagnostic products using CellPro's cell-selection technology, paying royalties to CellPro on sales.

## 1993 FINANCIAL REPORT

Scotiabank

### Consolidated Statement of Income

(Canadian \$ millions)	1993	1992
For the financial year ended October 31		
<b>Interest income</b>		
Loans	\$ 5,288	\$ 5,729
Securities	1,574	1,398
Deposits with banks	314	357
<b>Total interest income, including dividends</b>	<b>7,176</b>	<b>7,482</b>
<b>Interest expense</b>		
Deposits	3,708	4,191
Subordinated debentures	435	374
Other	427	469
<b>Total interest expense</b>	<b>4,570</b>	<b>4,934</b>
<b>Net interest income</b>	<b>2,606</b>	<b>2,548</b>
Provision for credit losses	465	449
<b>Net interest income after provision for credit losses</b>	<b>2,141</b>	<b>2,099</b>
<b>Other income</b>		
Credit fees	310	289
Service charges	280	270
Investment banking	200	146
Foreign exchange and precious metals	136	140
Other	211	176
<b>Total other income</b>	<b>1,137</b>	<b>1,001</b>
<b>Net interest and other income</b>	<b>3,278</b>	<b>3,100</b>
<b>Non-interest expenses</b>		
Salaries	1,252	1,153
Pension contributions and other staff benefits	144	117
Premises and equipment expenses, including depreciation	478	481
Other expenses	483	442
<b>Total non-interest expenses</b>	<b>2,357</b>	<b>2,193</b>
<b>Income before the undiminished:</b>	<b>1,217</b>	<b>1,162</b>
Provision for income taxes	450	475
Non-controlling interest in net income of subsidiaries	13	11
<b>Net income for the year</b>	<b>\$ 714</b>	<b>\$ 676</b>
Preferred dividends paid	\$ 92	\$ 79
<b>Net income available to common shareholders</b>	<b>\$ 622</b>	<b>\$ 597</b>
Average number of common shares outstanding (000's)	208,262	203,083
<b>Net income per common share</b>	<b>\$ 2.98</b>	<b>\$ 2.94</b>
<b>Dividends per common share</b>	<b>\$ 1.12</b>	<b>\$ 1.04</b>

### Consolidated Balance Sheet Highlights

(Canadian \$ millions)	1993	1992
As at October 31		
<b>Cash resources</b>	<b>\$ 8,634</b>	<b>\$ 8,337</b>
Securities	17,836	14,226
Loans	72,204	68,052
Other	8,944	7,593
<b>Total assets</b>	<b>\$ 107,620</b>	<b>\$ 98,210</b>
Personal deposits	\$ 31,288	\$ 29,058
Business and governments deposits	30,009	30,802
Banks deposits	16,451	16,867
Total deposits	77,748	76,627
Other	20,812	14,378
Subordinated debentures	3,156	2,128
Shareholders' equity		
Preferred	1,300	1,000
Common	4,604	4,079
<b>Total liabilities and shareholders' equity</b>	<b>\$ 107,620</b>	<b>\$ 98,210</b>

Note 1: The Consolidated Consolidated Financial Statements have been prepared in accordance with generally accepted accounting principles including the accounting requirements of the Superintendent of Financial Institutions Canada. The statements include the assets, liabilities and results of operations of the Bank and its subsidiaries and effectively controlled associated corporations. Investments in associated companies, where the Bank has significant influence and holds at least 20% but not more than 50% of the voting shares, are accounted for on the equity basis.

Note 2: As at October 31, 1993, 211,272,120 common shares were issued and outstanding (October 31, 1992: 205,197,240). The per share statistics have been based on the daily average of equivalent fully paid common shares.

Note 3: The Shareholders' Auditors have audited and reported on the Consolidated Financial Statements of the Bank as at and for the year ended October 31, 1993. Their report is included in the Annual Report.

Note 4: Certain comparative amounts have been reclassified to conform with current year presentation.

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## INTERNATIONAL COMPANIES AND FINANCE

# Moody's lowers debt ratings of Daiwa Bank

By Emilio Terazono  
in Tokyo

Moody's Investors Service, the US credit rating agency, has lowered the debt ratings of Daiwa Bank, a Japanese commercial bank, due to prospects of deteriorating profits from its acquisition of Cosmo Securities and its loan exposure to the collapsed Muramoto Construction.

The agency lowered Daiwa's long-term rating to A3 from A1 and its short-term rating to Prime 2 from Prime 1.

Daiwa became the first Japanese bank to acquire a brokerage subsidiary when it bailed out Cosmo, a financially troubled second-tier stockbroker, last August.

Moody's said while the controversial purchase would provide the bank with a competitive advantage in entering the securities business on the long run, the cost of the debt-funded

acquisition would be a burden in the intermediate term.

Daiwa was one of the leading creditors of Muramoto, which filed for court protection with debts of up to ¥900bn (\$6.1bn) last month.

Moody's said Daiwa has "considerable exposure to Muramoto" and expects the cost of carrying significant non-performing assets, coupled with the additional provision and write-off requirements, will continue to depress the bank's earnings.

The problems come as Daiwa's earnings are being squeezed by the growing use of high-cost funds from trust accounts to maintain competitive yields on its trust products leading to lower net interest margins. In addition, its commission-based profits from discretionary asset management services and real estate brokerage remain vulnerable to volatile market conditions.

## HK power issue meets good demand on debut

By Louise Lucas  
in Hong Kong

Consolidated Electric Power Asia (CEPA), the power station interests spun off by Hong Kong property and infrastructure group Hopewell Holdings, yesterday gave investors a paper profit of 20 per cent on its stock market debut.

CEPA, which was sold off at HK\$12.50 a share in a combined HK\$5.94bn (US\$769m) offering, closed yesterday at HK\$15.

The stock accounted for 13.60 per cent of yesterday's activity on the Hong Kong market, with HK\$1.08bn worth of shares changing hands.

Brokers attributed the 20 per cent one-day rise in CEPA's share price to strong overseas institutional buying.

Stocks generally performed strongly in Hong Kong yesterday, with the Hang Seng Index swelling 3.29 per cent

to 9,609.69 on the back of a healthy HK\$7.9bn turnover.

CEPA hopes to cash in on huge forecast demand for electric power in Asia through its plans to construct and operate power stations in China and the Philippines. Big earnings, however, from these projects will not accrue to CEPA until 1998.

Due to the lag in large scale earnings coming on stream, CEPA came on to the market on a price-earnings multiple of around 47 times 1994 earnings, compared with the Hong Kong market's overall rating of around 13 times.

CEPA is forecasting a profit for the 12 months to June 30, 1994, of HK\$208m.

The issue was split into two tranches: a HK\$1.17bn public offering and a HK\$4.77bn placement.

Both were heavily oversubscribed.

## Bridge Oil buys US assets for A\$76m

By Nikkai Tait  
in Sydney

Bridge Oil, the Australian oil and gas company, yesterday announced that it is buying a number of properties - including some underdeveloped acreage - in the US from Santa Fe Energy Resources for around A\$76m (US\$50m). It also unveiled plans to float a minority interest in its American subsidiary in the US.

The assets are being acquired by Bridge Oil (USA), the company's existing US vehicle, which is currently 100 per cent owned by the Australian parent. They include producing natural gas and oil properties in the Anadarko Basin in Oklahoma, in the Texas Panhandle, and other smaller interests in Wyoming and central Texas.

Bridge said that the properties currently contain about 56.8bn cu ft equivalent of not proved and probable reserves, worth A\$80m.

The exploration acreage, costing A\$16m, totals about 9.2m acres in the western US, the bulk of which offers production rights for up to 13 years and conversion into long-term production leases if a discovery is made.

The company plans to fund the deal via a mixture of cash and shares - including the delivery of a 10 per cent interest in Bridge Oil (USA) to Santa Fe Energy. The initial public offering of shares in Bridge Oil (USA), which is conditional on regulatory approvals, will involve 4m shares, and the proceeds will be used for general corporate purposes and to fund a A\$67m dividend payment to Bridge Oil itself.

After the flotation, it is estimated that around 28.57 per cent of Bridge Oil (USA) will be owned by the general public; 10 per cent by Santa Fe; and the remaining 61.43 per cent by the parent Bridge Oil company.

Bridge Oil became involved in the US petroleum industry in 1981, expanding in the late 1980s. In January 1990, it spent A\$147m on a package of producing properties from USX Corporation.

# South African company removes its veil

Mobil divestment Engen is planning its brave new future, writes Robert Corzine

Appeals for foreign investment have replaced demands for divestment in the lexicon of most black politicians in South Africa. But some strategic sectors of the South African economy, such as its sprawling defence industry and oil companies, have stayed shrouded in secrecy even as the political process opened up.

That veil is now lifting, with international investors being able to assess the long-term viability of some of South Africa's largest companies.

Politics, however, still exert a strong influence over the future strategy of many such companies, including Engen, the country's biggest oil company, which was created by the divestment in 1989 of Mobil Oil's South African subsidiary.

Unlike other divestments, in which the foreign parent company retained the right to reacquire its South African assets, the break with Mobil was a "clean one", according to Mr Rob Angel, chief executive.

That, combined with Engen's unbundling last month from Gencon, the industrial and mining group that bought Mobil's assets, has given Mr Angel a free hand. But the absence of international support means the company is subject to domestic constraints, such as a foreign currency shortage,

which act as a brake on its ambitions.

Engen, which will get the bulk of its \$2.4bn estimated turnover this year from oil refining and marketing in South Africa and neighbouring countries, is keen to use its new-found freedom to add international upstream production to its domestic downstream business. It is also keen to secure a London listing,

because of currency restrictions. Its exploration activities are focused on west Africa, where it shares licences with big multi-national oil companies in Angola, Gabon and Namibia. It has a 2.2 per cent share of the Alba field in the North Sea, as well as a small holding in the Britannia gas field and a 10 per cent share in the Bukha gas condensate development off Oman. The

subject to a number of upgrades which will boost its capacity to 105,000 barrels a day. That will allow it to capitalise on growing demand in Africa north of the Limpopo river, which forms the border with Zimbabwe, and to which the company's exports have risen from 1.9m barrels in 1991 to 5.7m barrels this year.

Deregulation in South Africa's refining and retail

without undermining its 26 per cent market share.

But deregulation is also likely to create a new retail competitor. Sasol, the synthetic oil from coal company that provides 45 per cent of the country's petrol, is keen to enter the retail market with its own service stations. At present Sasol is limited to a single pump at the stations of other companies.

The government-set floor price for Sasol is \$23 a barrel, compared with current world oil prices of \$16-\$17 a barrel. A new government will be under financial pressures to reduce the protection that Sasol receives, but it will probably hesitate to remove it altogether because of the drastic effect such a step would have on employment at the vast Sasol plants and the coal mines which supply them.

The prospect of much fiercer domestic competition and Engen's heavy exposure to refining and marketing lies behind the drive to secure its own sources of crude oil, according to analysts, as a strong production base would allow it to benefit from any increase in crude oil prices.

But Mr Angel concedes that only a return to economic growth in South Africa can underpin the company's long-term performance.

Deregulation in South Africa's refining and retail market is likely to pose the biggest challenge to Engen's fortunes, and likely to create a new retail competitor.

although such a move will have wait until after next April's election.

Greater access to foreign exchange is crucial if Engen is to realise its goal to source 50 per cent of its crude oil needs from its own reserves within 10 years. Mr Chris Sloan, an analyst at Johannesburg stockbrokers Ferguson Brothers, says the lack of foreign exchange is one reason why Engen has "not been very successful" in its early exploration efforts.

Mr Angel concedes that Engen has had to pass up acquisition opportunities

company is looking to buy, although it is likely to remain on a small scale until it has greater access to hard currency.

Acquisitions are also likely in the downstream side of the business in Africa, says Mr Angel, who wants Engen to have a "leadership role" in exporting and distributing refined products to the sub-Saharan market.

That goal is probably attainable, according to Mr Sloan, who says one legacy of sanctions is the highly efficient refineries which the government encouraged oil companies to build. Engen's main Durban refinery has been sub-

ject to a number of upgrades which will boost its capacity to 105,000 barrels a day. That will allow it to capitalise on growing demand in Africa north of the Limpopo river, which forms the border with Zimbabwe, and to which the company's exports have risen from 1.9m barrels in 1991 to 5.7m barrels this year.

Deregulation in South Africa's refining and retail

market is likely to pose the biggest challenge to Engen's fortunes. "There is an increasingly public and political debate over the oil industry," says one Cape Town-based industry analyst, who believes the issue is likely to be left for a new government.

Full deregulation of the market is unlikely, but the formula used by the government to set wholesale and retail prices will probably be replaced by a mechanism "which more accurately reflects world prices", says Mr Sloan.

Mr Angel believes deregulation will allow Engen to close some of the low volume units among its 1,500 petrol stations

## NEWS DIGEST

### Norfolk firm tests Taiwan engines

Taiwan has moved closer to production of its own car engines to supplant components imported from Japan, writes John Griffiths in London.

The first test engines have been run at the Norfolk, eastern England, headquarters of Lotus Engineering, under a contract which aims to bring the engines into commercial production by 1997.

The contract provides for development work and technology transfer by Lotus to the Taiwan government-backed Industrial Technology Research Institute. It is said by

Lotus, which was sold by General Motors to Bugatti of Italy earlier this year, to be worth several million pounds over its two-year life.

### Stake in Philippine shipbuilder sold

A consortium of Filipino and Singaporean interests has won the bid for the Philippine government's majority holdings in Philippine Shipyard and Engineering Corporation (Philseco), a ship-repair company based in the Subic industrial zone, writes Jose Galang in Manila.

JG Summit Holdings Inc., a major Philippine group with diversified investments, owns 60 per cent of the winning bid, with the remainder divided equally between two Singapore-based shipping companies, Jurong Shipyard and Sembawang Holdings.

The winning group offered a bid of 2,038n pesos (\$72m) for an 87.7 per cent control of Philseco, part of the government's total holdings of 97.4 per cent in the company.

Kawasaki Heavy Industries of Japan owns 2.6 per cent. It has, under the rules of the bidding, a month to top yesterday's bid by 5 per cent or the JG Summit group will formally clinch it.

### Castrol sets up new technology centre

Castrol, the UK-based lubricants multinational, has established a B45m (\$1.7m) technology centre in Thailand to support Asia's fast-growing lubricants markets, writes Victor Mallet in Bangkok.

Castrol profits in Asia have been growing at more than 10 per cent a year and the region

now accounts for more than a fifth of Castrol's worldwide profits. Castrol Thailand already ranks sixth among the group's affiliates and could soon be more profitable than Castrol UK, company executives say.

The new building is Castrol's first major technical centre to specialise in motorcycle lubricant research outside the UK.

"The Thai motorcycle market is showing a steady incline, but the development of more efficient two-stroke lubricants is becoming more vital," said Mr Philip Prescott Beasley, technical director of Castrol Thailand.

Thailand has some 7m motorcycles and more than 1m cars. Castrol, which has more than 20 per cent of the automotive business in Thailand, has found many customers stay loyal to their brand when they move from motorcycle to car.

## Samsung buys European TV parts producer

By John Burton in Seoul

Samsung has acquired a former East German manufacturer of glass for colour TV picture tubes as part of the South Korean conglomerate's efforts to expand television production facilities in Europe.

Samsung Corning will take over Fernsehglas Tschernitz (FTG) from Treuhander, the privatisation agency for East German companies.

Samsung is expected to pay \$30m for the acquisition and an expansion of facilities, but a final price will not be determined until early next year when a valuation of FTG assets is completed.

## INTERNATIONAL ECONOMIC INDICATORS: PRICES AND COMPETITIVENESS

Yearly figures are shown in index form with the common base year of 1985. The real exchange rate is an index throughout; other quarterly and monthly figures show the percentage change over the corresponding period in the previous year and are positive unless otherwise stated.

■ UNITED STATES						■ JAPAN						■ GERMANY						■ FRANCE						■ ITALY						■ UNITED KINGDOM						
	Consumer prices	Producer prices	Earnings	Unit labour costs	Real exchange rate		Consumer prices	Producer prices	Earnings	Unit labour costs	Real exchange rate		Consumer prices	Producer prices	Earnings	Unit labour costs	Real exchange rate		Consumer prices	Producer prices	Earnings	Unit labour costs	Real exchange rate		Consumer prices	Producer prices	Earnings	Unit labour costs	Real exchange rate		Consumer prices	Producer prices	Earnings	Unit labour costs	Real exchange rate	
1985	100.0	100.0	100.0	100.0	100.0	1985	100.0	100.0	100.0	100.0	100.0	1985	100.0	100.0	100.0	100.0	100.0	1985	100.0	100.0	100.0	100.0	100.0	1985	100.0	100.0	100.0	100.0	100.0	1985	100.0	100.0	100.0	100.0	100.0	
1986	101.9	98.6	102.2	99.4	85.0	1986	100.5	95.3	101.4	103.3	118.5	1986	99.9	97.2	104.5	101.5	103.4	1986	100.0	97.2	104.5	101.5	103.4	1986	100.0	100.0	100.0	100.0	100.0	1986	100.0	100.0	100.0	100.0	100.0	
1987	105.6	100.7	103.8	98.7	76.1	1987	101.2	92.5	103.1	106.8	123.1	1987	100.1	95.1	108.0	107.1	111.0	1987	102.5	97.8	107.8	105.0	104.9	1987	101.0	102.2	111.8	105.5	102.1	1987	101.0	102.2	111.8	105.5	102.1	
1988	109.9	103.2	108.9	99.1	71.1	1988	102.2	92.3	107.8	108.2	131.0	1988	101.4	96.2	113.0	106.9	110.8	1988	106.8	102.8	111.1	104.0	102.9	1988	116.5	106.8	118.4	108.7	100.8	1988	113.0	113.2	126.2	108.8	102.4	
1989	115.2	108.5	110.0	101.1	74.8	1989	104.9	94.2	114.0	108.1	122.9	1989	104.2	99.3	117.3	108.0	108.2	1989	124.2	119.1	125.6	112.3	104.2	1989	124.2	119.1	125.6	112.3	104.2	1989	124.2	119.1	125.6	112.3	104.2	
1990	121.5	113.8	113.8	104.3	72.7	1990	105.7	96.7	120.1	108.2	108.9	1990	107.0	101.0	123.8	110.3	105.9	1990	116.5	107.1	120.6	106.5	103.8	1990	131.8	117.8	134.7	118.9	106.1	1990	131.8	117.8	134.7	118.9	106.1	
1991	126.6	116.3	117.3	107.8	73.6	1991	111.8	96.8	124.2	101.8	114.7	1991	110.7	103.4	131.8	115.0	108.9	1991	120.2	105.8	125.8	113.8	102.1	1991	140.3	121.7	147.9	131.3	105.1	1991	140.3	121.7	147.9	131.3	105.1	
1992	130.4	117.7	120.2	108.1	73.8	1992	113.9	95.8	125.6	111.1	116.5	1992	111.7	104.8	136.6	115.1	110.7	1992	123.0	104.0	130.3	115.8	105.2	1992	147.7	124.0	155.9	136.8	101.2	1992	146.4	137.2	173.1	133.8	102.7	
4th qtr 1992	3.0	1.6	2.2	-0.8	75.3	0.9	-1.2	-0.1	10.4	119.9	3.7	0.5	n.a.	7.7	113.3	2.2	-1.5	n.a.	2.6	108.7	4.8	2.3	2.9	6.5	92.3	3.0	3.1	5.7	-0.5	92.7	4th qtr 1992	4.8	2.3	2.9	6.5	92.3
1st qtr 1993	3.2	2.0	2.8	-1.9	71.4	1.2	-1.1	-0.5	7.0	123.7	4.3	0.5	n.a.	8.8	118.4	2.1	-2.3	n.a.	10.8	108.6	4.8	3.1	2.8	4.4	88.2	1.8	3.6	4.7	-2.1	92.3	1st qtr 1993	4.8	3.1	2.8	4.4	88.2
2nd qtr 1993	3.2	2.0	2.8	-1.9	71.4	1.2	-1.1	-0.5	7.0	123.7	4.3	0.5	n.a.	8.8	118.4	2.1	-2.3	n.a.	10.8	108.6	4.8	3.1	2.8	4.4	88.2	1.8	3.6	4.7	-2.1	92.3	2nd qtr 1993	4.8	3.1	2.8	4.4	88.2
3rd qtr 1993	2.8	0.8	2.5	-2.5	76.5	1.6	-1.8			130.7	4.2	-0.3	n.a.		110.7	2.2		n.a.	108.3	4.3	4.3			87.5	1.6	4.3	4.4	-0.6	98.5	3rd qtr 1993	4.3	4.3			87.5	
December 1992	2.9	1.6	2.5	-1.0	76.4	0.9	-1.2	-1.0	10.3	120.1	3.7	0.5	5.2	6.7	112.6	2.0	n.a.	3.8	n.a.	108.3	4.6	2.6	2.4	n.a.	94.1	2.6	3.4	5.4	-1.1	91.1	December 1992	4.6	2.6	2.4	n.a.	94.1
January 1993	3.3	2.0	3.4	-1.8	76.5	1.0	-1.1	-3.9	10.1	119.9	4.4	0.8	-	11.5	113.5	2.1	n.a.	-	n.a.	108.4	4.2	2.9	2.8	n.a.	91.0	1.7	3.6	4.9	-2.9	93.3	January 1993	4.2	2.9	2.8	n.a.	91.0
February	3.2	2.0	2.5	-2.1	77.8	1.3	-1.0	1.3	7.3	119.7	4.2	0.5	-	11.5	113.6	2.1	n.a.	-	n.a.	108.9	4.4	2.9	2.8	n.a.	88.2	1.8	3.6	5.1	-2.5	94.8	February	4.4	2.9	2.8	n.a.	88.2
March	-1.3	2.0	2.5	-2.9	77.7	1.2	-1.0	3.1	6.4	124.2	4.2	0.5	-	10.9	113.5	2.1	n.a.	-	3.4	108.9	4.2	2.9	2.8	n.a.	91.0	1.8	3.6	4.7	-2.5	90.1	March	4.2	2.9	2.8	n.a.	91.0
April	3.2	2.5	2.5	-2.1	76.9	0.9	-1.3	2.0	5.4	127.0	4.3	0.1	-	7.5	113.0	2.1	n.a.	-	n.a.	110.0	4.2	3.7	3.6	n.a.	94.3	1.9	3.7	4.0	5.3	-1	April	4.2	3.7	3.6	n.a.	94.3
May	3.2	2.1	2.5	-2.1	76.8	1.1	-1.5	2.3	6.1	129.6	4.2	-0.3	-	5.0	112.6	2.0	n.a.	-	n.a.	110.1	4.0	3.9	2.6	n.a.	88.0	1.3	4.0	4.8	-1.1	94.8	May	4.0	3.9	2.6	n.a.	88.0
June	3.0	1.3	2.5	-2.9	75.8	1.0	-1.5	-0.9	4.5	131.7	4.2	-0.4	-	3.2	111.5	1.9	n.a.	-	2.8	108.4	4.2	4.1	4.2	n.a.	89.0	1.2	4.0	4.8	-0.4	94.8	June	4.2	4.1	4.2	n.a.	89.0
July	2.8	1.3	2.5	-2.4	76.7	1.6	-1.2	1.5	5.4	136.2	4.2	-0.3	-	3.0	110.6	2.1	n.a.	-	10.2	108.6	4.4	4.2	4.1	n.a.	94.2	1.4	4.0	4.8	-1.0	94.4	July	4.4	4.2	4.1	n.a.	94.2
August	2.8	0.8	2.5	-2.4	75.8	2.0	-1.8	-1.0		137.5	4.2	-0.3		0.1	110.5	2.2	n.a.	-	n.a.	106.5	4.4	4.1	4.2	n.a.	88.3	1.7	4.3	3.6	-0.9	98.9	August	4.4	4.1	4.2	n.a.	88.3
September	2.7	0.5	2.5	-2.6	76.4	1.3	-2.0			142.8	4.0	-0.5		11.2	112.1	2.3	n.a.	2.3	n.a.	105.3	4.2	4.3		n.a.	87.5	1.7	4.3	4.5	0.3	98.8	September	4.2	4.3		n.a.	87.5
October	2.8	0.2			76.8	1.2	-1.0			138.7	3.6	-0.3		13.4	113.4	2.2	n.a.		107.1	4.3				88.5	1.4	4.0	4.5	0.3	98.0	October	4.3				88.5	
November					76.0	1.0				137.4	3.7			13.5					107.0	4.2				88.1						November	4.2				88.1	





It's quiet in a Lexus LS400. Virtually all noise has been designed out.

For instance, steel and resin 'noise sandwiches' blanket the cabin. The drivetrain is in one straight line to reduce vibration. The engine is a smooth 4.0 litre V8.

In fact, you could hear a pin drop, if it weren't for the deep pile carpet.

But what's left is a silence no ordinary

sound system could cope with. So Lexus created a system uniquely appropriate to the LS400. An ideal sound field ensures that, wherever you sit in the LS400 cabin, you hear the same rich sound quality.

At the corners of this field are seven speakers. Two dome tweeters for high sounds, four full range speakers and an eight inch subwoofer for a fuller bass sound.

The system produces 180 watts maximum power. (Well, there is a lot of silence to fill.) And, as if it isn't already

a system to make even audiophiles question their domestic listening arrangements, it can be upgraded further. With a remote six-disc CD auto-changer.

But can a car's sound system ever be a reason to buy the car?

Certainly it can if it's indicative of the unheard of lengths the maker has gone to in developing the whole car.

Unfortunately, we can think of only one car which qualifies. See your Lexus dealer for a sound check.



Lexus LS400

# Driving a Lexus LS400 improves your hearing

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## Resilient S&N shows 2% advance to £109m

By Philip Rawstone

Scottish & Newcastle, the brewing and leisure group, showed resilience amid continuing market difficulties to record a 2 per cent increase in first half pre-tax profits to £108.9m, against £107.2m.

"In the UK we experienced some signs of returning consumer confidence but it remained inconsistent and a lack of certainty was particularly evident in the high street," said Mr Brian Stewart, chief executive.

"In our European leisure operations, bookings continued to be remarkably high but the reluctance of customers to spend freely was evident."

"Christmas sales will not only be important in the immediate financial contribution they make to annual results but also as an indicator of consumer attitudes to spending."

Fully diluted earnings per share for the six months to end-October edged ahead to

17.7p (17.4p). The interim dividend is increased 4 per cent to 5.9p.

Operating profit was virtually flat at £122m on turnover of £773.7m (£760.7m).

Beer profits declined from £83.8m to £80.4m before tax on marginally lower turnover of £443.1m. Leading brands, such as Beck's, backed by a 20 per cent increase in advertising, held volume declines to 4 per cent in a market which declined 3 per cent.

However, increased competition in the take-home trade resulted in a significant fall in volumes of low-margin, own-label products and a small overall loss in market share.

The change to end-product duty brought additional costs of £2m, but the results benefited from a 25m reduction in bad debt provisions. Cost reduction initiatives taken last year made some contribution but will only become fully effective in the second half.

Retail profits improved from £28.4m to £29.2m on turnover maintained at £145.3m in spite of fewer managed pubs. Food sales grew more than 5 per cent - and at 8 per cent of turnover offered "great scope for future development," said Mr Stewart.

Integration of the Chef & Brewer estate, acquired in October, will be completed by the end of the financial year together with the first phase of an investment programme of £11m in 150 of the pubs.

Leisure operations lifted profits 9 per cent to £42.4m (£38.8m) on turnover up from £169.7m to £183.3m. Center Parc's profits in the UK were ahead 15 per cent and bookings for 1994 were significantly higher. Occupancy rates of 89 per cent were achieved in France where capacity was doubled. Pontini recorded a 5 per cent increase in turnover and an 8 per cent rise in bookings.

See Lex

## Strong sales in eastern Europe help lift Oriflame to £5.39m

By Peggy Hollinger

A strong performance in eastern Europe helped Oriflame, the cosmetics and toiletries direct sales company, to increase interim pre-tax profits by 25 per cent to £5.39m.

The contribution from associated companies - including Oriflame's 25 per cent stake in Oresa, the eastern European cosmetics door to door retailer set up three years ago - more than doubled from £410,000 to £990,000.

This helped the group offset the effects of weaker currencies in Sweden and Finland, which were estimated to have depressed profits for the six

months to September 30 by about £500,000. Pre-tax profits were also helped by a sharp drop in interest payments from £203,000 to £482,000.

Sales were 11 per cent higher at £40.9m.

Mr Robert A Jochimick, the Swedish chairman, said the bulk of the profits increase came from the eastern European business.

"This year has been spectacular," he said. In the last year Oresa's sales had increased from £20m to between £50m and £60m.

Oriflame supplied products to Oresa, as well as receiving licensing and royalty fees from its eastern European counter-

part. About 40 per cent of the profits generated by Oresa found their way back to Oriflame.

The core direct sales division showed a 24 per cent increase in sales, with the strongest increase from emerging markets such as Portugal, Mexico and Chile.

The UK, US and France remained difficult. Oriflame intended to relaunch in all three markets, and restructuring charges of about £350,000 were taken for changes in France and the US.

Earnings rose by 24 per cent to 8.4p.

The interim dividend is increased by 0.3p to 4.3p.

## API improves 41% despite depressed market segments

By Peter Pearce

Pre-tax profits at API, the packaging group, advanced 41 per cent from £3.65m to £5.12m in the year to October 2. The shares rose 8p to 35p.

Turnover grew 18 per cent to £78.4m (£66.3m), said Mr Michael Smith, group chief executive, in a period when API's main "geographical market segments were depressed and competition had become stiffer."

He added that the group was "in a strong, healthy position", and in the future had "a lot to go for" - the expansion of API's relatively small market shares, growth driven by new products, organic growth and further differentiation between existing products.

Six months ago Mr Smith talked of the addition of a third leg within the packaging and office products areas; that is "still on the cards", and could either be a large acquisition, or cash and shares - the group has net cash of £3.6m (£800,000) - or two or three

smaller ones. Talks were continuing, he said. Mr Smith said that API had forged "longer term alliances with key accounts", some up to three years and not fixed just on price. Both sides could reduce costs, with the customer being able to eliminate its quality control points.

Group pre-tax margins were up from 6.2 to 7.4 per cent. In foils and laminates they rose from 6.8 to 8.1 per cent as operating profits grew to £3.62m (£2.52m) on turnover of £44.8m (£37m).

In converted film and paper products, margins moved into double digits at 10.1 per cent, against 9.8 per cent. Operating profits rose to £2.5m (£2.08m) on turnover of £24.7m (£20.8m).

Profits at the somewhat anomalous heating and ventilation side slipped to £208,000 (£230,000) on sales down to £3.8m (£4.2m).

Earnings emerged at 16.85p (12.8p) per share after a tax charge up to 33.5 (29) per cent because of an improvement in US earnings. The final dividend is lifted to 4.5p (4.45p) for a total of 8.35p (7.5p).

## Avesco incurs £2.3m deficit

By Paul Taylor

Avesco, the broadcast equipment and services group, which has been investing heavily in its VideoLogic multimedia technology division, yesterday reported a £2.22m first half pre-tax loss and announced a share placement to raise a deficit for the six months to September 30 compared with a previous profit of £23,000. Turnover slipped to £10.8m (£11.2m).

There were losses of 2.97p against earnings of 0.025p. The directors stated that the lower sales reflected difficult

trading conditions in Europe at a time when the group has yet to benefit from any sales of mass market products developed under the IBM/VideoLogic joint development agreement established last year.

During the period the VideoLogic division incurred a £2.34m (£341,000) trading loss on turnover of £4.58m (£4.57m). Mr Richard Murray, chairman, said, nevertheless, that VideoLogic had met "a number of important milestones in its product development programme, its expansion into Germany and France and in the recruitment of senior executives."

The group's AVS Broadcast television products division reported an increased trading loss of £272,000 (£210,000) on flat turnover of £1.75m (£1.73m), while all the businesses in the services division traded profitably but reported a reduced trading profit of £758,000 (£1.18m) on turnover of £4.58m (£4.72m).

In order to meet VideoLogic's short-term need for additional working capital, SG Warburg is underwriting a placement of 4.06m shares with investors at a price to be determined by demand. Meanwhile, the group is continuing to work on a timetable for spinning off VideoLogic.

## NHL losses cut to £37m after lower provisions

By Alison Smith

National Home Loans Holdings, the mortgage lender, announced a sharp fall in pre-tax losses from £159.4m to £36.6m in the year to September 30, after a marked drop in provisions against bad and doubtful debts.

Provisions were halved at £82.1m (£163.9m) because of stabilising house prices, falling arrears, and improvements in the amount of cash received as a percentage of monthly payments due.

Mr Jonathan Perry, chairman, said that the number of accounts more than three months in arrears had fallen to 1,762 from the group's total of 45,000 accounts, compared with 6,130 at the end of September 1992.

He added that the company was now trading profitably. The company said the improvement was shown by the cash received from borrowers in arrears increasing from 81 per cent of normal monthly payments in September 1992 to 98 per cent in September 1993.

Total operating income for the period was £83.4m (£51.8m). Losses per share were 43.1p (£56.4p).

Mr Perry said that the next stage of the group's strategy was to rebuild its capital base. The group managed £28m of mortgage assets at the end of September, down by 23 per cent over the past year.

NHL's mortgage lending business was badly hit in the fall-out from the late 1980s housing boom. Rapid growth at that time meant that its portfolio was not strong enough to survive the subsequent collapse.

It intends to start lending new mortgages from mid-1994, offering products to new borrowers. Existing borrowers, who have been paying rates above the market average, yesterday benefited from the passing on of the 0.5 per cent pre-Budget cut in interest rates.

Mr Perry said that there were preference dividend arrears of £16m, and negative distributable reserves of £153m.

During the year the group brought on to its balance sheet the special purpose vehicle companies which make up most of its mortgage securitisations. It said that the effect on the 1993 trading performance was neutral.

## Upton & Southern cuts loss

Upton & Southern Holdings, the reorganised retail and property group, cut losses before tax from £709,000 to £497,000 for the 28 weeks to August 14.

Trading losses on continuing businesses were reduced from £251,000 to £82,000.

Turnover was down from £5.2m to £4.19m, with discontinued operations contributing £650,000 (£1.34m).

Following the financial reorganisation, losses per share came out at 0.45p (7.86p).

## Molynx falls on bid move

Shares of Molynx Holdings, the closed circuit television, security and building equipment management systems maker, fell 10p to 41p on news that directors were in preliminary talks regarding a possible recommended offer for the company.

If concluded, the offer would be below the current share price, reflecting difficult trading conditions.

## Westland ahead 22% to £30.5m

By Paul Betts, Aerospace Correspondent

Westland, the UK's only helicopter manufacturer, yesterday reported a better than expected 22 per cent rise in pre-tax profits, as strong productivity improvements offset difficult conditions in defence and civil markets.

Pre-tax profits rose to £30.5m (£24.9m) on a 6 per cent increase in sales to £448m (£422.1m) for the year to October 1.

New orders showed a sharp decline to £465m compared with £1.18m last time when the company won an order worth £800m for 44 of its new Merlin EH101 helicopters from the Royal Navy.

Mr Alan Jones, chief executive, said notwithstanding the lower order intake, the company had a "good year".

"Our new style of management has become deeply engrained inside the organisation and has enabled us to improve productivity and reduce costs," said Mr Jones, who is taking over as executive chairman when Sir Leslie Fletcher, the 71-year-old chairman, retires in February.

Productivity improvements and a sharp drive to reduce costs helped to cut net debt from £30m to £6m, leaving



Alan Jones: poised to exploit a recovery in the civil market

gearing at 3.1 per cent (16.4 per cent).

However, the company expects to see a temporary rise in borrowings over the next few years to finance investments in the production launch of the EH101, which it is developing jointly with

Agusta of Italy. Mr Jones said Westland would be spending some £40m-£50m on the EH101 programme, of which £20m had already been spent last year.

After the disappointment of the new Canadian government's recent decision to cancel an order for 43 EH101s,

Westland is now banking on a Royal Air Force order for about 25 EH101s as well as orders for a civil version of the large helicopter from North Sea oil offshore operators.

Westland has also continued efforts to diversify in the civil aerospace sector. Mr Jones said the company was well positioned to take advantage of a recovery in the civil market.

Earnings per share improved to 13.7p (12.1p); the final dividend is 3.25p, raising the total for the year to 4.5p (4.25p).

### COMMENT

The results, at the top end of expectations, reflected a good performance in a difficult year for the defence and aerospace industry and underlines the steady progress the company has made to improve productivity and margins over the past five years. The City expects this will help the company maintain profit improvement next year, even though there are still few signs of recovery in the civil aerospace market and the defence business is still contracting. Profits are forecast to rise to about £38m-£39m in the current year. Against the continuing uncertainty of the defence and aerospace markets, analysts are focusing on potential rather than on the short term multiple.

## Disposal losses hit Dobson Park

By Andrew Bolger

Losses on the disposal of businesses cut pre-tax profits at Dobson Park Industries, the mining equipment and industrial electronics group, from £10.3m to £4.2m in the year to October 2.

The group, which merged its mining equipment arm with a rival to survive the UK coal crisis, said it remained positive about the medium to long-term future of the business.

Mr Alan Kaye, executive chairman, said that "in the light of difficult trading conditions and the collapse in the scale of British Coal's activity, a satisfactory performance has been achieved overall."

Operating income fell from £10.3m to £8.75m. Under FR3 3, the pre-tax profits were reduced by a charge of £4.6m on the sale of two businesses, Power Tools and Revere Aerospace, which included £1.5m of previously written off goodwill.

From January, Dobson Park combined its mining equipment division with Mecro International, a 1988 buy-out from the divi-

sion of Dowty Group, in a joint venture called Longwall International. In the period to October 2, it made sales of £18m, just under 20 per cent of which went overseas.

Between them, Dobson Park and Mecro supplied all of British Coal's hydraulic roof supports and 80 per cent of its conveyors, used to carry coal away from the face.

Profits from mining equipment comprised £1.15m from the group's own activities prior to the merger and £3.33m from its 50 per share in Longwall. The group has since lifted its stake in Longwall to 69 per cent.

Markets in the industrial electronics division continued to be tough, with operating profits down from £4m to £3.9m. However, Mr Kaye said the sale of Revere Aerospace and Power Tools had removed businesses which had become peripheral to the group's strategy. Two recent acquisitions, PressTech Controls - which makes colour register controls for the printing industry - and TEC vibration monitoring

equipment, would further strengthen the division.

Earnings per share fell from 5.52p to 1.42p under FR3 3, and to 4.65p before the exceptional disposal costs. The final dividend of 2.55p (3.85p) is cut in line with the interim to give a total of 3.75p (5.75p), a reduction of 35 per cent.

### COMMENT

These are respectable figures, given the speed of the demise of British Coal. As well as cutting costs at the Longwall joint venture, Dobson Park has strengthened its underperforming electronics division by disposal and making potentially useful infill acquisitions. Given the strength of Longwall's position in overseas markets, the group should benefit from its reduced cost base next year. The shares, down 4p to 85p, are on a prospective multiple of 15.8. They are unlikely to advance much until the electronics division performs better, but they are underpinned at current levels by a premium prospective yield of 6 per cent.

## Friends Provident pays £115m for NM Financial Management

By Alison Smith

Friends Provident, one of the UK's largest mutual life assurance and investment management organisations, has moved to widen its distribution capacity by buying the NM Financial Management Group for £115m.

NM was sold by the National Mutual Life Association of Australia, which intends to focus its development in Asian and Australasian markets where it is a more significant force than it has been in the UK.

The purchase of NM's life, pensions and unit trusts businesses will add over £2bn to Friends Provident's £10bn of assets under management. It will also involve the transfer of 350,000 policies and 250,000 clients to Friends Provident's customer base of about 2m policies and 1.5m clients.

Mr Michael Doerr, the managing director of Friends Provident who will become chairman of NM, said yesterday that while he expected some short-term benefits as the two organisations came together, the main purpose of the move was to broaden the customer base in order to cut unit costs.

Some 200 to 250 of NM's 300-plus self-employed sales agents are expected to join the 400 existing employed Friends Provident sales force. Mr Norman Clavin, life assurance analyst with Smith New Court, said that the move made sense for both parties: smaller offices such as NM were facing increasing expenses to meet compliance costs, while Friends Provident had to take account of the breaking of its link with the Abbey National in February.

Friends Provident is also buying NM's life and pensions company in the Republic of Ireland.

## CRT edges ahead to £472,000

By Peter Pearce

CRT, whose initials now indicate only two of its areas of interest - recruitment and training - lifted pre-tax profits from £462,000 to £472,000 in the six months to October 31.

Mr Karl Chapman, chief executive, said the group had withdrawn from consultancy because that side of the business had become a "tail" that was wagging the CRT dog.

When CRT bought Doctus Consulting Europe from the receiver for £175,000 in August 1991, what had started as an advantage - exposure to European markets - soon became a disadvantage as the economies of France, Spain and Portugal declined.

However, Mr Chapman was keen to point out the buoyancy of the group's other two areas of activities. Operating profits in recruitment rose 47 per cent to £470,000 (£320,000) on turnover up 29 per cent to £9.75m (£7.58m). In training they increased 23 per cent to £1.86m (£1.51m) on turnover expanded to £11m (£9.15m).

Consultancy operations made losses of £700,000 (£270,000) on turnover of £1.66m (£1.49m) and there were associated closure and disposal costs of £471,000 (£557,000).

Earnings grew to 0.58p (0.48p) per share, insufficient at this stage - to cover the interim dividend lifted to 0.75p (0.65p). Mr Chapman said the rise was more an indication of the group's strong cashflow, rather than profits.

## Wind of change blows up on the Clyde

By James Buxton

Mr James McColl, executive chairman of Clyde Blowers, has ambitions. "We aim to be a hyper-growth company in the next five years, and build a big engineering group based in Scotland."

Despite having had a quote since the late 1980s, Clydebank-based Clyde Blowers is not a familiar name in financial circles. But its shares have risen 76 per cent this year to peak recently at 80p. In the year to August 31 its turnover jumped from £4.6m to £7.4m and it returned to profit.

Clyde Blowers is a long-established producer of equipment for cleaning soot caused by coal and oil from boilers. It is one of the main concerns in a niche market and has customers worldwide.

However, it was stagnating until early last year when Mr Ted Wilson, the 87-year-old chairman, retired and the Wilson family sold 29.9 per cent of the company for £900,000 to Mr McColl, an engineer with company doctor experience.

"It was like walking into a museum," says Mr McColl, who is 40. "The company was reactive and did not seek customers or orders for spares." Profits had been invested in a £2m shares portfolio. "But I bought 50 years of experience. He swiftly shed 30 of the 120-strong workforce, improved manufacturing efficiency, found new orders and increased sales of spares. New equipment sales were up 30 per cent this year."

In April Clyde Blowers

bought Brighton-based Sturtevant Engineering, a maker of pressurised pneumatic conveying equipment which removes such things as ash. Clyde Blowers spent only £336,000 but gained a company with £5m of turnover and a strong order book. In August it took over Boiler Products Engineering, a Belgium-based subsidiary of GEC-Alsthom, also in boiler cleaning. The £3m deal was financed with a £3.6m rights issue. It gave Clyde Blowers more access to the francophone boiler market and made the group the biggest independent boiler cleaning equipment maker in Europe.

The recent results suggest that Clyde Blowers has returned to financial health. Although it still made an operating loss of £268,000, Mr McColl says the loss was down to £54,000 in the second half, and included the cost of setting up a £200,000 head office operation. The operating losses were wiped out by a £473,000 profit on the sale of the remains of the investment portfolio, producing pre-tax profits £265,000 (against a loss of £141,000).

Mr McColl says its current turnover was equivalent to £15m on an annualised basis, and that orders are strong. Now the new head office staff is looking at acquisition targets in the UK, the Continent and the US to complement organic growth in boiler cleaning and pressurised pneumatic equipment.

"There are fantastic opportunities and we are in a wonderful position with cash and no borrowings," says Mr McColl.

## Bristol Scotts row deepens

The row at Bristol Scotts deepened yesterday as Mr Ian Stevens, who has called for the resignation of two directors and the chairman, yesterday demanded clarification of several issues. These included an acquisition which he stated had not been declared in the accounts, and the transfer of 384,213 non-voting shares into voting shares.

He reiterated his call for an extraordinary meeting at which he aims to appoint himself and fellow shareholder Sir Ian Rankin to the board.

Meanwhile, the dispute over control of shares, originally owned by director Mr Nicholas Korman and subsequently sold to publisher Mr Nicholas Berry will continue at a high court hearing on Friday.

### DIVIDENDS ANNOUNCED

	Current payment	Date of payment	Current dividend	Total for year	Total last year
Acad £	2.25	Feb 1	2.1	9	8.3
Alstom	8	Feb 18	8.7	9	7.25
API	4.9	Feb 14	4.45	8.25	7.5
Cook (DC) £	0.3	Jan 17	nil	-	0.8
Crown Eyeglass	3	Jan 7	2.5	-	7
CRV	0.75p	Jan 22	0.65	-	2.8
Dobson Park Inds	2.55	Feb 28	3.85	3.75	5.75
East Surrey	4.43	Jan 18	4.1	-	11.46
Electronic Data	3.5	Apr 7	3.1	5.5	5.1
Faber Preet	9	Jan 21	7.7	14	12
Granada	5.725	Apr 5	4.95	8.75	7.7
Hadleigh Inds £	0.5	Jan 14	nil	-	0.5
WPP Ltd	3.25p	Jan 14	3	-	7.25
King & Shazson	4	Jan 7	4	-	9
Leigh Interests	2.46	Jan 28	2.46	-	7.83
Marling Inds	0.21	Mar 4	nil	-	0.85
Nth Ireland Elec	3.39	Mar 31	-	-	-
Oriflame Int	4.3	Feb 17	4	-	12
Scot & Newcastle	5.98p	Feb 11	5.76	-	18.83
Vega	1.04	Feb 14	0.87	-	2.73
Westland	3.25	Feb 21	3	4.5	4.25
Yates Brothers	1	-	0.78	-	2.46

Dividends shown pence per share net except where otherwise stated. £10 increased capital. \$USM stock. \$ Irish pence.

### OFFER ON BEHALF OF GRANADA GROUP PLC FOR LWT (HOLDINGS) PLC

Lazard Brothers & Co., Limited ("Lazard Brothers") announces on behalf of Granada Group PLC ("Granada") that by means of a formal offer dated 6th December, 1993 (the "Offer Document") which was despatched to shareholders in LWT (Holdings) plc ("LWT") yesterday and by means of this advertisement, Lazard Brothers makes an offer (the "Offer") on behalf of Granada for the shares of LWT not already owned by Granada. Terms defined in the Offer Document have the same meanings in this advertisement.

The Offer Document is available to all shareholders of LWT (Holdings) plc ("LWT") who are entitled to vote at the LWT shareholders' meeting on 10th December 1993. The Offer Document is also available to all shareholders of LWT (Holdings) plc who are entitled to vote at the LWT shareholders' meeting on 10th December 1993. The Offer Document is also available to all shareholders of LWT (Holdings) plc who are entitled to vote at the LWT shareholders' meeting on 10th December 1993. The Offer Document is also available to all shareholders of LWT (Holdings) plc who are entitled to vote at the LWT shareholders' meeting on 10th December 1993. The Offer Document is also available to all shareholders of LWT (Holdings) plc who are entitled to vote at the LWT shareholders



## COMPANY NEWS: UK

## Whitecroft in black with £1.8m

By Ian Hamilton Fazel,  
Northern Correspondent

Whitecroft, the Cheshire-based textiles, lighting, building products and medical cotton fibre group, achieved pre-tax profits of £1.32m in the six months to September 30, a sharp turnaround from interim losses of £29.3m last time, which increased to £41.8m for the full year.

The directors are, nevertheless, not declaring an interim dividend, preferring to wait for the year-end to ensure improvement is sustained. The shares closed at 77p, up 5p.

The turnaround was largely the result of nearly £40m of property write-downs and other provisions distorting the 1992-93 figures, compared with only £600,000 this time for closure of a loss-making subsidiary.

However, operating profits trebled to £2.67m (£870,000) and were nearly double the full year's £1.36m. This was in spite of a 5 per cent drop in turnover to £59.5m (£64m) for the half.

Earnings per share of 3.6p compared with losses of 88.2p last time and 94.5p for the year.

Net tangible assets per share were 52.4p, a drop from 81.5p a year ago, but an improvement on the last full year's 48.6p.

Whitecroft is now run by Mr Mike Derbyshire, chief executive, formerly of Norcross, and Mr Marilyn Ellis, who joined as finance director from Incheape this year.

The non-executive chairman is Mr David Kendall, chairman of Bunzl. He succeeded Mr Peter Gould, who resigned as executive chairman last March.

Whitecroft appears now to have scraped through the recession by disengaging from property, housebuilding and building materials.

Core products include lighting systems, book-cloth for passports, fire doors and cotton wool. A third of output is exported, with demand growing in eastern Europe for street lighting, passports, lampoons and better safety equipment.

Mr Derbyshire said yesterday: "All our property is beginning to move and can be viewed as pile of cash waiting to be released." Gearing at the end of October was 119 per cent, with borrowings down to £26m against £43m in January.

## Reorganised Leigh 24% up at £5m

By Tim Burt

Leigh Interests, the waste management company, said yesterday that a wide-ranging business reorganisation helped lift pre-tax profits by 24 per cent, from £4.08m to £5.06m, in the half year to September 30.

Turnover was up from £52.3m to £56.4m, following the company's decision to reduce its dependence on waste disposal for the construction industry, especially in the south of England.

Instead, it has targeted commercial waste - refuse from offices, shops and factories - to build up an alternative customer base.

Mr Arthur Kent, finance director, said: "We did rather badly because of the recession in construction, but we've now restructured our landfill sites to handle more commercial waste."

The results, however, were held back by operating losses of £700,000 at two new waste plants in the Midlands, which were unable to operate at full capacity because of manufacturers' faults.

The faults are due to be repaired in the second half.

Operating profits - up from £8.07m to £8.78m - were also affected by a 3 per cent fall in the volume of liquid wastes treated by the company.

Mr Kent blamed the decline on the European Commission's decision to postpone a new directive requiring the disposal of such waste at new treatment plants.

Earnings per share increased to 5.5p (4.4p), while the interim dividend is held at 2.4p.

## A prescription for future growth

Glaxo sets great store on developing its own products, reports Paul Abrahams

Last week, Dr Richard Sykes, Glaxo's chief executive, spent most of his Tuesday afternoon in the Sorcever's Room of the elegant Thameside hotel, the Savoy.

His object was to explain to the media, for the first time in nearly two years, the progress of the pipeline of new products with which Glaxo will conjure its future.

The company, Europe's largest drugs group and challenger for the world's top position currently held by Merck of the US, also offered a round-up of the commercial environment and the prospects for its drugs.

The presentation's emphasis on research and development was significant, however. The group was not going to be seduced by diversification, said Dr Sykes. He has rejected strategies adopted by other groups such as worldwide rationalisation, mergers, and joint ventures and mergers for generic and over-the-counter non-prescription medicines.

Instead, Glaxo has adopted a strategy of concentrating on patented prescription medicines in spite of an increasingly difficult environment for drugs.

The group's strategy was to focus rather than disperse its energies, said Dr Sykes. It planned to maximise sales of established drugs such as Zantac, the anti-ulcer treatment; bring new and innovative drugs to market; bring these products to market fast on a global basis; and invest in developing markets.

The radical strategic departure adopted by Merck of vertical integration through the \$6bn (£4bn) acquisition of Medco Containment, a mail order company, was also dismissed by Dr Sykes. "The con-

cept is good, it's doubtful whether it was worth what Merck paid for it. There are other ways of achieving the same ends with less expense," he claimed.

Meanwhile, Glaxo is adopting a flexible approach to change, Dr Sykes stressed the importance of reacting to local conditions. This commitment to local autonomy within a framework of central strategic direction was also stressed in the group's annual report this year, and was in sharp contrast to the managerial style of Dr Ernest Marlo, Dr Sykes's predecessor, who was sacked last March.

Dr Marlo had an extremely detailed grasp of local conditions and is understood to have modelled in the activities of certain subsidiaries.

Key to the group's ability to maximise revenues remains its ability to increase revenues from Zantac, the best-selling medicine of all time with sales last financial year of £2.2bn.

Dr Sykes was dismissive of the threat posed to the drug through the eradication of a bacterium, helicobacter pylori, associated with ulcers.

Most patients were effectively treated with Zantac maintenance therapy said Dr Sykes. A few patients taking the drug relapsed, and for these it was a good idea to use a combination of drugs to eradicate HP, he agreed.

"But if you eradicate HP in everybody who comes into the surgery with ulcers, it will work in anything between 10 per cent and 70 per cent of patients. That's playing Russian roulette because half of those people are going to relapse and 10 per cent will perforate, and of those 3 per cent will die. You can't

Compound	Indication	International registration dossier	New drug application
Servent	Asthma using dihalide	Approved	1H 94
Roflume	Asthma using dihalide	Approved	2H 94
Roflume	Asthma using metered dose inhaler	Approved	2H 94
Roflume	Allergy	Approved	2H 94
STC	Aids	Approved	1H 95
Lamivudine	Post-radiation emesis using tablet	Approved	1H 95
Zofran	Opoid-induced emesis using injection	Approved	1H 95
GR87442N	Chemotherapy and radiation emesis using injection	Approved	1H 95
GR87442N	Chemotherapy and radiation emesis using tablet	Approved	1H 95
GR87442N	Post-operative nausea	Approved	1H 95
Ondansetron	Anticancer	Approved	1H 95
Ramifenitil	Anaesthetic and analgesic	Approved	1H 95
GR82132X	Type 2 diabetes	Approved	1H 95
Ranitidine bismuth citrate	Duodenal ulcer using tablet	Approved	2H 94
Ranitidine bismuth citrate	Gastric ulcer using tablet	Approved	2H 94
Ranitidine bismuth citrate	Anti-arthritis drug induced ulcers	Approved	2H 94
Ranitidine bismuth citrate	Gastric ulcer maintenance	Approved	2H 94
Zantac	Duodenal ulcer	Approved	2H 95
Zantac	Gastric ulcer maintenance	Approved	2H 95
Zantac	Anti-arthritis drug induced ulcers	Approved	2H 95
Imigran	Migraine tablet	Approved	1H 94
Imigran	Cluster headache injection	Approved	1H 94
Imigran	Migraine using effervescent	Approved	1H 94
Imigran	Migraine using intranasal device	Approved	1H 95
Imigran	Migraine using suppository	Approved	1H 95
GR85548A	Migraine tablet	Approved	1H 95

gamble like that," he argued.

The main threat to Zantac remained generic competition. The US patents of Tagamet, SmithKline Beecham's drug and one of Zantac's main competitors, expire next year, but Dr Sykes did not expect it to have a big impact.

"There's no direct relationship between price and usage. Service, volume discounts and what other drugs you offer are equally important," said Dr Sykes.

Meanwhile, Glaxo plans to drive growth through its new products, Imigran, the migraine treatment, Zofran, an anti-nausea drug, and

Servent, an asthma medicine.

Glaxo's increasing management flexibility has been demonstrated by its decision to launch low-dose versions of Imigran, following criticisms of the high price of the 100mg version. Dr Sykes said the move to launch 25mg and 50mg doses would help expand the market for those with mild migraines and, although not particularly driven by criticisms of price, the decision would help reduce them.

Meanwhile, analysts believe the development pipeline looks rich with few "one-boots" products. There are more compounds in exploratory development - 16 - than ever before.

Zofran, also known as ondansetron, was as effective as Warner-Lambert's Zofran for the treatment of Alzheimer's symptoms and was far safer,

said Dr Sykes. He hoped it would be filed by early 1995.

Also highlighted by Dr Sykes was GR82132X, a treatment for non-insulin dependent diabetes. Glaxo's HIV-treatment, 3TC, also known as lamivudine, looks effective in hepatitis B, a huge killer in the developing world, he said.

Ranitidine bismuth citrate could become important for HP eradication when used with antibiotics. Ramifenitil, an injectable anaesthetic, was a sleeper, capable of becoming an important drug, he quipped.

Given the company's full pipeline, and its clear strategy based on patented prescription medicines, Dr Sykes, Glaxo's sorcerer-in-chief, has staked the group's future on its ability to create and market new drugs. Glaxo's shareholders must now hope the sorcerer's strategy does not turn out to be hocus-pocus.

## Marling advances to £910,000 despite losses on disposals

Despite difficult trading, Marling Industries, the industrial textiles company, reported pre-tax profits up from £559,000 to £910,000 in the six months to end-September.

The result was struck after losses of £485,000 on disposal of discontinued operations.

Turnover was £29.5m

(£38.8m), including £4.04m (£13.6m) from discontinued activities. Earnings per share fell from 0.56p to 0.29p following the rights issue in July and there is an interim dividend this time of 0.2p. In the period, the company spent £4m acquiring Muller Group in Germany and Albert Green.

## EDP slips to £4.67m as interest income falls

By Paul Taylor

Electronic Data Processing, the Sheffield-based computer software and services group, reported slightly lower full year profits reflecting a decline in net interest income.

Pre-tax profits in the year to September 30 slipped to £4.67m, compared with £4.86m, as net interest receivable declined to £563,000 (£784,000).

Earnings per share were 35.14p (38.4p),

partly reflecting a higher tax rate, but the proposed final dividend is increased to 3.5p, making a total of 5.5p (5.1p). The group also plans a 2-for-1 scrip issue.

Turnover fell to £14.3m (£15.5m), including £1.1m from last November's US acquisitions. The fall reflected the continued sharp decline in computer equipment prices.

Recurring service revenues, including the licensing of the group's Merchant software package, continued to run at about

£8m a year while system and solution sales fell from £6.64m to £5.3m.

Operating profits increased to £4.11m (£4.08m) despite a £540,000 increase in research and development expenditure to £1.41m. The US acquisitions, Via Systems and Open, incurred a £108,000 loss, but are expected to break even this year.

Mr Michael Heller, chairman, said the most significant development was the introduction of UniVision, an advanced database management system.

## Faber Prest edges ahead to top £5m

Helped by halved interest payable of £415,000, compared with £846,000, pre-tax profits of Faber Prest moved ahead from £4.8m to £5.03m for the year to September 30.

Turnover of the company, whose principal activity is the provision of specialist services in the industrial, distribution and car retailing markets, dipped slightly from £70.5m to £70.1m, but continuing operations contributed £66.8m, against £61.4m.

Earnings per share were 34.4p (31.8p) while the final dividend is lifted to 9p to give a 14p (12p) total.

## Vega benefits from contracts expansion

Vega Group saw interim profits jump by an effective 20 per cent as the software and systems engineering company won new contracts in the space and aerospace sector and moved into new markets.

On turnover ahead to £4.52m (£3.62m), the pre-tax line for the six months to October 31 advanced to £757,000. The restated comparable figure of £404,000 was struck after an exceptional charge of £227,000 related to the expenses of its Stock Exchange flotation in June 1992.

The interim dividend goes up to 1.04p (0.87p), payable from earnings of 3.54p (1.34p).

The group's cash balance at the period end amounted to £782,000 (£191,000).

The interim dividend goes up to 1.04p (0.87p), payable from earnings of 3.54p (1.34p).

Turnover was up from £13.8m to £14.7m. Earnings per share came out at 3.1p (3.3p losses).

The pre-tax figure was also boosted by a reduction in interest payments to £173,000 (£386,000).

The company returns to the interim dividend list with a distribution of 0.5p.

Yates Brothers advances 13%

Yates Brothers Wine Lodges, the independent drinks group, lifted pre-tax profits by 13 per cent, from £1.25m to £1.41m, in the six months to September 28.

Turnover rose by 34 per cent to £22m, with sales buoyant across retail and wholesale activities.

The interim dividend is increased from 0.78p to 1p, payable from earnings per share of 4.5p (3.8p).

Burford £29m debenture issue

Burford, the property investor and trader, is raising £29m via an issue of first mortgage debenture stock dated 2018.

Lead manager to the issue is Barclays de Zoete Wedd with Barclays de Zoete Wedd Securities acting as listing sponsor. Payment for the stock is due on December 13.

de Morgan back in the black

Helped by a 22 per cent rise in turnover to £1.21m, de Morgan

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مكتبة الامم المتحدة



# NIE's £42.3m pleases City

By Michael Smith

Northern Ireland Electricity yesterday pleased the market in its first results since privatisation by announcing an 18.5 per cent rise to £42.3m in interim pre-tax profits and a dividend ahead 12.6 per cent at 3.35p.

Although the dividend increase was slightly below what most analysts expect the regional electricity companies to pay on average in the current results round, the City approved of the company's success in tackling its cost base.

Earnings per share for the six months to September 30 rose to 21.8p (17.9p). Turnover of £206.2m (£185.4m) was helped by tariff increases of 5.6 per cent and a 2 per cent increase in units distributed (weather corrected).

Sir Desmond Lormier, chairman, said Northern Ireland's economy had not experienced the booms and troughs that other UK areas had been

through in recent years and he expected the economy to remain healthy in the second half of the year.

NIE's sales will also be helped by current trends in prices of coal and oil which generate all of the province's electricity. Mr Patrick Haren, chief executive, said the company did not expect to experience the same kind of pressure for next year's prices as it did for this year's.

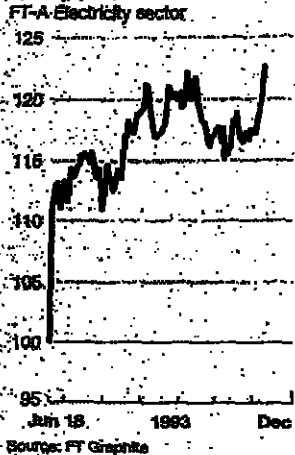
The company's performance in the first half of the year was helped by a 7.3 per cent reduction in controllable operating costs. Mr Gordon Woodworth, finance director, said £2.6m, or 8 per cent, had been taken off salaries and employee related costs.

The company reduced its payroll number from 3,413 in September 1992 to 3,187 this September and has set a target of 2,837 by March 1996.

Appliance trading moved from a £300,000 loss to a £209,000 profit.

## Northern Ireland Electricity

Share price relative to the FT-A Electricity sector



### COMMENT

When NIE was floated six months ago, the fear was that the association of the region it serves with terrorism would cast a constant shadow over

the shares. In the event the shares have considerably outperformed the market in spite of renewed political problems in Northern Ireland and they rose again yesterday by 15p to 226p on a partly paid basis.

The attraction of NIE is that the external threats are minimal. Competition will take longer to bite than on the mainland and the regulator's review of the distribution is further away than that faced by the regional distribution companies for April 1995. The management has also played its part in vindicating the shares' outperformance by tackling costs more effectively than expected.

They still have some work to do to improve customer service but this is a small downside. Assuming a dividend of 11.4 per cent, the shares are on a prospective yield of 4.1 per cent. That is near the bottom of the res's range, leaving little scope for further outperformance. But there are few dangers for shareholders.

## Cementone reverses into Multitrust

By Tim Burt

Cementone, the specialist paints and building chemicals manufacturer, is coming to the market through a reverse takeover of Multitrust, the property investment company.

The transaction, involving a £2.8m rights issue and the disposal of Multitrust's £3.2m investment portfolio, is expected to value Cementone at up to £20m.

The company decided to follow the reversal route following a failed attempt last year to expand by acquiring a rival supplier. Mr Alfred Baxendale, managing director, said Cementone had persuaded its parent company, UB International, owned by Mr Vijay Mallya, the Indian entrepreneur, that its future growth depended on going public.

"Mr Mallya sees this as the best way forward. Without it growth might have been restricted," Mr Baxendale said.

Cash raised by the takeover, which is due to be completed by the end of January, will be used to buy the freehold of the manufacturing plant and to finance acquisitions.

In the year to December 31 1992, pre-tax profits almost doubled to £995,000 (£518,000) on flat turnover of £17.2m (£17.3m). Pro forma profits in the current year are expected to approach £1.5m.

Mr Kenneth Prentis, finance director, said Cementone's performance had improved despite a 35 per cent contraction in the market for specialist paints and building chemicals in the last three years.

The new board will be chaired by Mr Alan Clements, former group finance director at ICL, with Mr Mallya as deputy. Mr Andrew Perloff, chairman of Multitrust, will be a non-executive director.

### Reuters stake

Reuters has acquired a minority stake in AdValue Media Technologies, a privately-held New York-based concern which markets services to advertising agencies.

## B&C creditors can expect at least 21p in the pound

By Andrew Jack

Creditors to British & Commonwealth, the financial services conglomerate that collapsed in 1990, will receive at least 21p in the pound, according to a report of the administrators to the company.

If the outcome of several outstanding legal actions is successful, unsecured creditors may receive more than twice that figure, administrators from accountants Ernst & Young believe.

Total payments to creditors to date have totalled 15p in the pound, including a fourth dividend of 2p paid out last month. The administrators' costs are £14.7m, with a further £26m in legal fees.

Realisations to date now total nearly £1bn including investment income of £100m, against distributions of £702m, split between B&C, and its finance (BCFG), merchant banking (BCMB) and property arms.

The current projected returns are 21p to creditors of B&C, 25p to BCFG and 100p in the pound to BCMB. The banks to the group will receive 50p in the pound because they are all creditors to both B&C and BCFG.

These could be increased substantially by possible litigation against the directors and professional advisers to Atlantic Computers, the leasing company acquired by B&C.

In a letter to creditors at the end of last month, the joint administrators say their investigations are nearly complete and they expect advice on whether to proceed from leading counsel and solicitors "during the next few months".

Any decision may be influenced by the conclusions of a report by inspectors appointed by the Department of Trade and Industry to examine Atlantic, which is now believed to have been completed.

Mr Stephen Adamson, one of the joint administrators, said yesterday: "We are investigating the position. No

decision has been taken." B&C won a £172m award against Samuel Montagu and Quadrex, following the latter's failure to complete the purchase of the wholesale broking division of Mercantile House, which was acquired by B&C before it collapsed.

The money is now being held by the court, pending an appeal on both the liability and size of damages which has been scheduled for January 1995.

The House of Lords is due to hear an appeal from the Inland Revenue against a tax refund of £80m paid by B&C, and which the court of appeal found in the group's favour.

The money to be distributed may be increased by a further £164m if legal action scheduled for January next year finds against preference shareholders in Caledonia Investments, for which banks are suing B&C for breach of covenant.

There is also a dispute over £99m for which B&C is suing its own finance division.

## Tight controls help IWP to £4.52m

By Tim Coone in Dublin

IWP, the Irish industrial holding group, reported a 5 per cent increase in pre-tax profits from £4.31m to £4.52m (£4.3m) on turnover up 4 per cent to £48.4m for the six months to September 30.

The company said that despite depressed consumer spending during the period, especially in its main UK market, the core household products and packaging divisions performed satisfactorily due to tight management control.

The small and unprofitable telecommunications division is

to be disposed of by the year-end.

Enhanced growth is anticipated in the full year, due to a first-time contribution from Levensdal Beheer, the Dutch toiletries and household products group, which IWP purchased last October in a complex £561.2m cash and shares offer.

Mr Joe Moran, chief executive, said that in future almost 50 per cent of profits would be sourced from the Netherlands division, which is expanding into the German and east European markets, instead of from the UK at present.

He said that a combined marketing and purchasing approach in the enlarged group "will bring results in 1994-95 better than this year". He said gearing is expected to drop from the current 98 per cent to 85 per cent by year-end, and 40-45 per cent within 12 months due to cash flow and the anticipated expansion of the equity base.

Earnings per share were 12.1p (11.35p) and an interim dividend of 3.25p (3p) is declared.

The company has also announced a series of board changes, including a separation

of the roles of chairman and chief executive. Mr Joe Moran, formerly executive chairman, is now chief executive, while Mr Frank Plunkett Dillon, a non-executive director and hitherto deputy chairman, becomes chairman.

Two new non-executive directors join the board; Mr JWC Van de Veer, a director of Levensdal and chairman of P&C, the Dutch retail clothing group, and Mr Patrick Dowling, a former deputy chief executive of Allied Irish Banks. Mr Jim Stewart is resigning from the board for health reasons.

## King & Shaxson in acquisition negotiations

By Garry Rimmer

King & Shaxson Holdings, the banking, money broking and discounting concern, turned in lower pre-tax profits of £761,908 for the six months to October 31 1993, compared with £2.05m.

The directors also announced that discussions were taking place with a view to acquiring Greig Midland Holdings, the principal subsidiary of which is a member of the Stock Exchange.

The consideration would be entirely in the form of K&S shares or share related consideration, involving the issue of up to 12m shares in total.

The main activities of Greig, a private concern, are investment management and financial advice for clients, brokerage and research services for institutions, and corporate finance.

On results, the directors explained that there were no changes in official rates during the six months, whereas a year ago

the group was able to benefit "from the exceptional turmoil surrounding the exit from the ERM".

After tax of £253,975 (£1.03m) earnings per share were 2.7p, well down from last time's 12.5p, while the interim dividend is unchanged at 4p.

Greig's accounts for the 53 weeks ended July 16 showed turnover of £19.8m and, following conversion of loan notes, would show pro forma pre-tax profits of £3m and shareholders' funds at that date of £7m.

## James Capel Flotations 1993

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## COMMODITIES AND AGRICULTURE

## Nickel and copper lead advance in metal markets

By Richard Mooney

Base metals prices at the London Metal Exchange all moved up strongly yesterday, led early on by nickel and later by copper, the exchange's flagship contract.

As brisk trading saw overhead, chart-based resistance broken down in several markets, gains on the day ranged between 0.47 per cent, for tin, and 3.49 per cent, for nickel.

Nickel's early strength was in part a response to reports of a strike at Russia's Norilsk smelter, which, according to a senior executive, last year produced 240,000 tonnes of the metal, equivalent to nearly 40 per cent of western world supply. That helped to lift the LME three months delivery price above a significant chart point at \$4,500 a tonne.

The Norilsk strike reports were later denied by the company, but by then the bullish sentiment seemed firmly entrenched and the three months price held most of its

gain to close at \$4,947.50 a tonne, up \$187 on the day and the highest since early August.

The next strongest performer was lead, which extended its recent upward run to \$40 in seven trading days with a \$10.75 rise to a \$457.25-a-tonne close for three months metal. That 10½-month high meant the market had exceeded its immediate chart objective, dealers said, but with supplies of lead concentrate (an intermediate material) remaining tight and demand from car battery makers continuing strong a further push towards the next major chart resistance area at \$488 a tonne was not being ruled out.

Aluminium joined in the upward move but proved unable to breach strong resistance near \$1,090 a tonne for the three months delivery position, which closed at \$1,088.25 a tonne, up \$12.50 from Friday.

The aluminium market's fundamentals remain "dire", according to the latest report from Billiton-Enthoven Metals.

"And our reading of the technical charts confirms the view that any sustained upward movement is unlikely", the London-based firm says.

It notes that when it last detailed aluminium smelter production cuts in late June "rumours abounded of impending further cuts in the US". But subsequent announcements by Aluminium Company of America and Reynolds Metals, have failed to make any real impact. "Indeed the latter's announcement actually coincided with a slump in prices in mid-August".

"At these depressed prices," Billiton says, "and with renewed weakness widely anticipated, the obvious conclusion would be that more producers will be forced to lower their production". But it suggests that such moves may be delayed while results are awaited from talks between the Communities of Independent States, the US, the European Union, Norway and Australia on multilateral cuts.

## Sterling windfall brings machinery mini-boom

Farmers visiting last week's Smithfield show had their cheque books at the ready

The organisers of last week's Royal Smithfield Show at Earl's Court in London are describing it as the most successful for five years. They report that the attendance was some 44,000 - up 8,000 on last year; that two-thirds of visitors were substantial farmers; and that one-third of the total placed an order while there.

For although Smithfield is widely known as the indoor farm show at which champion meat animals are chosen, it is also the main British winter exhibition for agricultural machinery. Indeed, for the majority of farmers who do not show their animals competitively, machinery has dominated the event for many years and is the main reason why most take a December trip to London.

A year ago, many farmers did not bother to attend the show. They had no money to spend and the prospect was bleak, following reform of the European Union's common agricultural policy, they would have even less before long. So in 1992 farmers stayed away in droves.

Those who went to Earl's Court asked one another how long the show could survive. There was talk of holding it every second year as a compensation. Some said the agricul-

## FARMER'S VIEWPOINT



By David Richardson

tural industry could not afford two major national shows - the Smithfield and the Royal, held outdoors in July - and that one would have to go.

But a year is a long time in agriculture. The full effects of the UK's departure from the ERM have now expressed themselves in the shape of higher farm prices. The increases, brought about by the working of the EU's green monetary system, which supports the local value of guaranteed prices in European currency unit terms when a national currency is devalued, in most cases exceeded reductions caused by CAP reform. The value of compensation for set-aside also increased for similar reasons and suddenly many UK farmers found themselves unexpectedly flush with cash.

As always, when farmers

have money, they spend it - and not always in the best long-term financial interests of their businesses. For although farm incomes have had a boost, they are still a long way short, in real terms, of where they were 10 years ago.

But there were good reasons to spend this year. The most pressing was that few machines had been replaced for several years and many were becoming unreliable and expensive to maintain. The fact that farmers themselves are being forced, because of labour economies, to drive tractors themselves, helps persuade them to buy new. And the 40 per cent first-year capital allowance against tax, which applied until October 31, clinched the decision for many.

The result was that UK tractor sales to the end of October were up by 28.4 per cent and although the current of capital allowance has now disappeared, the Agricultural Engineers' Association estimates that total sales to the end of the year will reach about 18,500 units, compared with the long-time low of 14,296 in 1992.

The AEA further expects UK sales of combine harvesters, which represents some 20 per cent of the total value of the farm machinery market, to be

up by at least 6 per cent on last year's 1,014 units. Other machinery, for cultivation etc. that is not registered and is therefore more difficult to count, is expected to be up 15 per cent in cash terms. But because two-thirds is imported and list prices have risen (the reverse side of the sterling devaluation coin) the rise in volume of sales is probably nearer 7 per cent.

All of this may appear to suggest that farmers are doing pretty well and that CAP reform is not hurting - so it cannot be working. But comparison with tractor sales figures in countries that have not benefitted from a currency devaluation is instructive.

In Greece, sales are down an estimated 84 per cent on last year, which admittedly was exceptional; in Holland, 48 per cent fewer tractors have been sold this year than last, again partly the result of special tax concessions in 1992. Denmark, which had no special circumstances, has recorded 37 per cent fewer sales and Belgium's are 25 per cent down. French and German sales figures are respectively 5 per cent and 11 per cent lower than in 1992.

Overall UK farmers are estimated to have bought 13 per cent fewer new tractors this year than last.

And, as many advisers to the

## Resumption of central bank gold sales forecast, unless prices rise

By Kenneth Gooding, Mining Correspondent

Central banks are engaged in a long-term effort to extricate themselves from the gold market and convert their huge holdings - 1.1bn troy ounces - into useful and more liquid foreign currency reserves, according to the New York-based precious metals research organisation, CPM Group.

The key to future disposals will rest with gold prices, it suggests. "If the rise in gold prices, from \$226 in March to \$380 in November proves not to be the beginning of a larger upward move for gold, central bank disposals will resume," says Mr Jeffrey Christian, CPM's managing director.

He recalls that central banks

sold an estimated 34.1m ounces of gold from their monetary reserves during the past two years, the greatest volume since 1987-88. The bulk of the sales were in 1993 and the first quarter of this year but since that time the nascent rally in gold prices has caused the banks to refrain temporarily from selling more. "No one wants to be selling gold at the beginning of a cyclical upward move in prices," says Mr Christian. "Therefore, prudence dictates caution at this time."

This caution is offset by ingrained attitudes within central banks, however. "If a central bank has decided to reduce its gold holdings as a matter of policy, but its managers then decide to wait to sell in expectation of higher prices, they

are in effect speculating on the price of gold," CPM states in a new report.

But given the perceived greater unpredictability of gold prices, there is increased resistance among managers to being taken as waiting for higher prices.

CPM says that it is fortunate for gold producers that gold prices are likely to move up in the next year or so. "If this proves to be the case, central bank gold deliveries in 1994 may be less than half the 22m ounces delivered to the physical market in 1993."

Central Bank Gold, \$2,500; and "Precious Metals-Gold" quarterly reports, \$2,000 a year, CPM, 71 Broadway, Suite 305, New York, NY 10006, US.

## EU urged to promote 'high natural value' agriculture

By Alison Maltland

European farmers could be urged to adopt environmentally friendly practices to qualify for common agricultural policy support, according to a report published today on farming and nature conservation.

The report, published by the independent Institute for European Environmental Policy, calls for a mix of policies to promote "high natural value" farming. This includes grazing with fewer animals, growing cereals with fewer agro-chemicals and traditional cultivation of olives and other tree crops.

"Extensive farming systems... support large areas of semi-natural habitat, which harbour many rare and endangered species of wildlife," it says.

Such farming is often in jeopardy, either because it is no longer economically viable or because some CAP support encourages intensification, says the report, prepared for the Dutch agriculture ministry. It cites aid for new irrigation for grubbing-up olive groves.

It proposes expanding direct incentives to farmers who use environmentally-sensitive methods, as provided for in the

"agri-environmental" programmes that member states are drawing up in line with CAP reforms.

However, budget constraints are likely to limit the growth of environmental incentive payments, especially in poorer regions, the report says. "A significant measure of support will continue to be essential for most 'high natural value' farmers. This reinforces the importance of integrating environmental objectives into the principal CAP support instruments."

For example, non-intensive livestock farmers could be encouraged by linking support

more closely to land management or making it conditional on low-density grazing.

Adapting payments to serve environmental objectives should cost little more and "might strengthen the case for retaining direct payments within the CAP in the long term".

Other suggestions in the report include exempting non-intensive arable farmers from set-aside; paying livestock farmers on different criteria according to area rather than number of animals; investing in infrastructure such as shelter for shepherds and livestock; and marketing products

from environmentally-friendly farms with an EU-wide labelling system.

"The objective is not to make farmers into 'park keepers' but to establish sustainable forms of agriculture," it says.

Farming of this kind should not be seen as unproductive. "In fact, it may be considered more in tune with the demands of the currently over-supplied EC food market."

Nature conservation and new directions in the EC common agricultural policy: C20, Institute for European Environmental Policy, 153 Buckingham Palace Road, London SW1W 9TR.

## COMMODITIES PRICES

## BASE METALS

## LONDON METAL EXCHANGE

(Prices from Amalgamated Metal Trading)

ALUMINIUM, 99.97% (per tonne)

Close 1067.68 1088.86.5

Previous 1055.56

High/Low 1055.56-1091.07

AM Official 1056.56.8

Kern close 1077.77.5

Open int. 270.367

Total daily turnover 35.018

ALUMINIUM ALLOY 5 (per tonne)

Close 934.36 958.60

Previous 922.7

High/Low 922.7-945.50

AM Official 929.30

Kern close 952.55

Open int. 2.517

Total daily turnover 4.99

LEAD (5 per tonne)

Close 413.44 444.45

Previous 404.44

High/Low 404.44-458.46

AM Official 431.5-432.5

Kern close 457.58

Open int. 29.034

Total daily turnover 4.948

NICKEL (5 per tonne)

Close 4885.95 4945.50

Previous 4773.48

High/Low 4653.48-4980.48

AM Official 4820.35

Kern close 4875.80

Open int. 48.743

Total daily turnover 8.952

TIN (5 per tonne)

Close 4730.35 4785.90

Previous 4685.90

High/Low 4685.90-4735.40

AM Official 4700.45

Kern close 4754.55

Open int. 15.420

Total daily turnover 2.485

ZINC, special high grade (5 per tonne)

Close 954.5-955.5

Previous 938.36

High/Low 938.36-954.55

AM Official 954.55

Kern close 974.75

Open int. 82.464

Total daily turnover 19.644

COPPER, grade A (5 per tonne)

Close 1671.5-1672.5

Previous 1656.5-1657.5

High/Low 1653.1657.1675

AM Official 1653.1657.1675

Kern close 1675.94

Open int. 203.412

Total daily turnover 50.015

LME AM Official rate 1.4941

LME Closing DTS rate 1.4980

Spot 1.4987 3 months 1.4952 6 months 1.4887 9 months 1.4844

HIGH GRADE COPPER (COMEX)

Close 76.70 76.90 76.90 5.62 1.158

Previous 76.85 76.85 76.85 1.534 1.11

High/Low 76.85 76.85 76.85 1.534 1.11

AM Official 77.15 77.15 77.15 42.21 8.42

Kern close 77.15 77.15 77.15 51.25

Open int. 77.80

Total daily turnover 7.688 11.289

## Precious Metals continued

GOLD COMEX (100 Troy oz. \$/troy oz.)

Close 378.8 378.8 378.8 1.17 847

Previous 378.8 378.8 378.8 1.17 847

High/Low 378.8 378.8 378.8 1.17 847

AM Official 378.8 378.8 378.8 1.17 847

Kern close 378.8 378.8 378.8 1.17 847

Open int. 144.382 45.473

PLATINUM NYMEX (100 Troy oz. \$/troy oz.)

Close 377.1 377.1 377.1 1.1 1

Previous 377.1 377.1 377.1 1.1 1

High/Low 377.1 377.1 377.1 1.1 1

AM Official 377.1 377.1 377.1 1.1 1

Kern close 377.1 377.1 377.1 1.1 1

Open int. 16.947 1.843

PALLADIUM NYMEX (100 Troy oz. \$/troy oz.)

Close 125.35 125.35 125.35 1.1 8

Previous 125.35 125.35 125.35 1.1 8

High/Low 125.35 125.35 125.35 1.1 8

AM Official 125.35 125.35 125.35 1.1 8

Kern close 125.35 125.35 125.35 1.1 8

Open int. 4.481

SILVER COMEX (100 Troy oz. \$/troy oz.)

Close 481.7 481.7 481.7 0.90 573

Previous 481.7 481.7 481.7 0.90 573

High/Low 481.7 481.7 481.7 0.90 573

AM Official 481.7 481.7 481.7 0.90 573

Kern close 481.7 481.7 481.7 0.90 573

Open int. 105.189 35.703

ENERGY

CRUDE OIL NYMEX (42,000 US gal. \$/barrel)

Close 14.13 14.13 14.13 0.25 26

Previous 14.13 14.13 14.13 0.25 26

High/Low 14.13 14.13 14.13 0.25 26

AM Official 14.13 14.13 14.13 0.25 26

Kern close 14.13 14.13 14.13 0.25 26

Open int. 15.96 0.21 16.14 15.96 3.889

CRUDE OIL IFE (\$/barrel)

Close 13.72 13.72 13.72 0.22 16.73

Previous 13.72 13.72 13.72 0.22 16.73

High/Low 13.72 13.72 13.72 0.22 16.73

AM Official 13.72 13.72 13.72 0.22 16.73

Kern close 13.72 13.72 13.72 0.22 16.73

Open int. 14.11 0.21 14.32 14.11 12.471 3.260

HEATING OIL NYMEX (42,000 US gal. \$/barrel)

Close 14.13 14.13 14.13 0.25 26

Previous 14.13 14.13 14.13 0.25 26

High/Low 14.13 14.13 14.13 0.25 26

AM Official 14.13 14.13 14.13 0.25 26

Kern close 14.13 14.13 14.13 0.25 26

Open int. 14.11 0.21 14.32 14.11 12.471 3.260

NATURAL GAS NYMEX (10,000 cu ft. \$/cu ft.)

Close 0.40 0.40 0.40 0.01 1.550

Previous 0.40 0.40 0.40 0.01 1.550

High/Low 0.40 0.40 0.40 0.01 1.550

AM Official 0.40 0.40 0.40 0.01 1.550

Kern close 0.40 0.40 0.40 0.01 1.550

Open int. 0.40 0.40 0.40 0.01 1.550

UNLEADED GASOLINE (NYMEX 42,000 US gal. \$/barrel)

Close 0.40 0.40 0.40 0.01 1.550

Previous 0.40 0.40 0.40 0.01 1.550

High/Low 0.40 0.40 0.40 0.01 1.550

AM Official 0.40 0.40 0.40 0.01 1.550

Kern close 0.40 0.40 0.40 0.01 1.550

Open int. 0.40 0.40 0.40 0.01 1.550

## GRAINS AND OIL SEEDS

WHEAT LCE (5 per tonne)

Close 100.25 100.25 100.25 1.28 16

Previous 100.25 100.25 100.25 1.28 16

High/Low 100.25 100.25 100.25 1.28 16

AM Official 100.25 100.25 100.25 1.28 16

Kern close 100.25 100.25 100.25 1.28 16

Open int. 100.25 100.25 100.25 1.28 16

WHEAT CBT (5,000 bu. mtr. cents/\$bu bushel)

Close 367.0 367.0 367.0 1.00 5.85

Previous 367.0 367.0 367.0 1.00 5.85

High/Low 367.0 367.0 367.0 1.00 5.85

AM Official 367.0 367.0 367.0 1.00 5.85

Kern close 367.0 367.0 367.0 1.00 5.85

Open int. 367.0 367.0 367.0 1.00 5.85

MAIZE CBT (5,000 bu. mtr. cents/\$bu bushel)

Close 264.0 264.0 264.0 1.00 5.85

Previous 264.0 264.0 264.0 1.00 5.85

High/Low 264.0 264.0 264.0 1.00 5.85

AM Official 264.0 264.0 264.0 1.00 5.85

Kern close 264.0 264.0 264.0 1.00 5.85

Open int. 264.0 264.0 264.0 1.00 5.85

SOYABEAN CBT (5,000 bu. mtr. cents/\$bu bushel)

Close 67.0 67.0 67.0 1.00 5.85

Previous 67.0 67.0 67.0 1.00 5.85

High/Low 67.0 67.0 67.0 1.00 5.85

AM Official 67.0 67.0 67.0 1.00 5.85

Kern close 67.0 67.0 67.0 1.00 5.85

Open int. 67.0 67.0 67.0 1.00 5.85

SOYABEAN OIL CBT (50,000 lbs. \$/cwt)

Close 26.0 26.0 26.0 1.00 5.85

Previous 26.0 26.0 26.0 1.00 5.85

High/Low 26.0 26.0 26.0 1.00 5.85

AM Official 26.0 26.0 26.0 1.00 5.85







## LONDON SHARE SERVICE

**INVESTMENT TRUSTS - CONT**

Company	1992	1991	1990	1989	1988	1987	1986	1985	1984	1983	1982	1981	1980	1979	1978	1977	1976	1975	1974	1973	1972	1971	1970	1969	1968	1967	1966	1965	1964	1963	1962	1961	1960	1959	1958	1957	1956	1955	1954	1953	1952	1951	1950	1949	1948	1947	1946	1945	1944	1943	1942	1941	1940	1939	1938	1937	1936	1935	1934	1933	1932	1931	1930	1929	1928	1927	1926	1925	1924	1923	1922	1921	1920	1919	1918	1917	1916	1915	1914	1913	1912	1911	1910	1909	1908	1907	1906	1905	1904	1903	1902	1901	1900	1899	1898	1897	1896	1895	1894	1893	1892	1891	1890	1889	1888	1887	1886	1885	1884	1883	1882	1881	1880	1879	1878	1877	1876	1875	1874	1873	1872	1871	1870	1869	1868	1867	1866	1865	1864	1863	1862	1861	1860	1859	1858	1857	1856	1855	1854	1853	1852	1851	1850	1849	1848	1847	1846	1845	1844	1843	1842	1841	1840	1839	1838	1837	1836	1835	1834	1833	1832	1831	1830	1829	1828	1827	1826	1825	1824	1823	1822	1821	1820	1819	1818	1817	1816	1815	1814	1813	1812	1811	1810	1809	1808	1807	1806	1805	1804	1803	1802	1801	1800	1799	1798	1797	1796	1795	1794	1793	1792	1791	1790	1789	1788	1787	1786	1785	1784	1783	1782	1781	1780	1779	1778	1777	1776	1775	1774	1773	1772	1771	1770	1769	1768	1767	1766	1765	1764	1763	1762	1761	1760	1759	1758	1757	1756	1755	1754	1753	1752	1751	1750	1749	1748	1747	1746	1745	1744	1743	1742	1741	1740	1739	1738	1737	1736	1735	1734	1733	1732	1731	1730	1729	1728	1727	1726	1725	1724	1723	1722	1721	1720	1719	1718	1717	1716	1715	1714	1713	1712	1711	1710	1709	1708	1707	1706	1705	1704	1703	1702	1701	1700	1699	1698	1697	1696	1695	1694	1693	1692	1691	1690	1689	1688	1687	1686	1685	1684	1683	1682	1681	1680	1679	1678	1677	1676	1675	1674	1673	1672	1671	1670	1669	1668	1667	1666	1665	1664	1663	1662	1661	1660	1659	1658	1657	1656	1655	1654	1653	1652	1651	1650	1649	1648	1647	1646	1645	1644	1643	1642	1641	1640	1639	1638	1637	1636	1635	1634	1633	1632	1631	1630	1629	1628	1627	1626	1625	1624	1623	1622	1621	1620	1619	1618	1617	1616	1615	1614	1613	1612	1611	1610	1609	1608	1607	1606	1605	1604	1603	1602	1601	1600	1599	1598	1597	1596	1595	1594	1593	1592	1591	1590	1589	1588	1587	1586	1585	1584	1583	1582	1581	1580	1579	1578	1577	1576	1575	1574	1573	1572	1571	1570	1569	1568	1567	1566	1565	1564	1563	1562	1561	1560	1559	1558	1557	1556	1555	1554	1553	1552	1551	1550	1549	1548	1547	1546	1545	1544	1543	1542	1541	1540	1539	1538	1537	1536	1535	1534	1533	1532	1531	1530	1529	1528	1527	1526	1525	1524	1523	1522	1521	1520	1519	1518	1517	1516	1515	1514	1513	1512	1511	1510	1509	1508	1507	1506	1505	1504	1503	1502	1501	1500	1499	1498	1497	1496	1495	1494	1493	1492	1491	1490	1489	1488	1487	1486	1485	1484	1483	1482	1481	1480	1479	1478	1477	1476	1475	1474	1473	1472	1471	1470	1469	1468	1467	1466	1465	1464	1463	1462	1461	1460	1459	1458	1457	1456	1455	1454	1453	1452	1451	1450	1449	1448	1447	1446	1445	1444	1443	1442	1441	1440	1439	1438	1437	1436	1435	1434	1433	1432	1431	1430	1429	1428	1427	1426	1425	1424	1423	1422	1421	1420	1419	1418	1417	1416	1415	1414	1413	1412	1411	1410	1409	1408	1407	1406	1405	1404	1403	1402	1401	1400	1399	1398	1397	1396	1395	1394	1393	1392	1391	1390	1389	1388	1387	1386	1385	1384	1383	1382	1381	1380	1379	1378	1377	1376	1375	1374	1373	1372	1371	1370	1369	1368	1367	1366	1365	1364	1363	1362	1361	1360	1359	1358	1357	1356	1355	1354	1353	1352	1351	1350	1349	1348	1347	1346	1345	1344	1343	1342	1341	1340	1339	1338	1337	1336	1335	1334	1333	1332	1331	1330	1329	1328	1327	1326	1325	1324	1323	1322	1321	1320	1319	1318	1317	1316	1315	1314	1313	1312	1311	1310	1309	1308	1307	1306	1305	1304	1303	1302	1301	1300	1299	1298	1297	1296	1295	1294	1293	1292	1291	1290	1289	1288	1287	1286	1285	1284	1283	1282	1281	1280	1279	1278	1277	1276	1275	1274	1273	1272	1271	1270	1269	1268	1267	1266	1265	1264	1263	1262	1261	1260	1259	1258	1257	1256	1255	1254	1253	1252	1251	1250	1249	1248	1247	1246	1245	1244	1243	1242	1241	1240	1239	1238	1237	1236	1235	1234	1233	1232	1231	1230	1229	1228	1227	1226	1225	1224	1223	1222	1221	1220	1219	1218	1217	1216	1215	1214	1213	1212	1211	1210	1209	1208	1207	1206	1205	1204	1203	1202	1201	1200	1199	1198	1197	1196	1195	1194	1193	1192	1191	1190	1189	1188	1187	1186	1185	1184	1183	1182	1181	1180	1179	1178	1177	1176	1175	1174	1173	1172	1171	1170	1169	1168	1167	1166	1165	1164	1163	1162	1161	1160	1159	1158	1157	1156	1155	1154	1153	1152	1151	1150	1149	1148	1147	1146	1145	1144	1143	1142	1141	1140	1139	1138	1137	1136	1135	1134	1133	1132	1131	1130	1129	1128	1127	1126	1125	1124	1123	1122	1121	1120	1119	1118	1117	1116	1115	1114	1113	1112	1111	1110	1109	1108	1107	1106	1105	1104	1103	1102	1101	1100	1099	1098	1097	1096	1095	1094	1093	1092	1091	1090	1089	1088	1087	1086	1085	1084	1083	1082	1081	1080	1079	1078	1077	1076	1075	1074	1073	1072	1071	1070	1069	1068	1067	1066	1065	1064	1063	1062	1061	1060	1059	1058	1057	1056	1055	1054	1053	1052	1051	1050	1049	1048	1047	1046	1045	1044	1043	1042	1041	1040	1039	1038	1037	1036	1035	1034	1033	1032	1031	1030	1029	1028	1027	1026	1025	1024	1023	1022	1021	1020	1019	1018	1017	1016	1015	1014	1013	1012	1011	1010	1009	1008	1007	1006	1005	1004	1003	1002	1001	1000	999	998	997	996	995	994	993	992	991	990	989	988	987	986	985	984	983	982	981	980	979	978	977	976	975	974	973	972	971	970	969	968	967	966	965	964	963	962	961	960	959	958	957	956	955	954	953	952	951	950	949	948	947	946	945	944	943	942	941	940	939	938	937	936	935	934	933	932	931	930	929	928	927	926	925	924	923	922	921	920	919	918	917	916	915	914	913	912	911	910	909	908	907	906	905	904	903	902	901	900	899	898	897	896	895	894	893	892	891	890	889	888	887	886	885	884	883	882	881	880	879	878	877	876	875	874	873	872	871	870	869	868	867	866	865	864	863	862	861	860	859	858	857	856	855	854	853	852	851	850	849	848	847	846	845	844	843	842	841	840	839	838	837	836	835	834	833	832	831	830	829	828	827	826	825	824	823	822	821	820	819	818	817	816	815	814	813	812	811	810	809	808	807	806	805	804	803	802	801	800	799	798	797	796	795	794	793	792	791	790	789	788	787	786	785	784	783	782	781	780	779	778	777	776	775	774	773	772	771	770	769	768	767	766	765	764	763	762	761	760	759	758	757	756	755	754	753	752	751	750	749	748	747	746	745	744	743	742	741	740	739	738	737	736	735	734	733	732	731	730	729	728	727	726	725	724	723	722	721	720	719	718	717	716	715	714	713	712	711	710	709	708	707	706	705	704	703	702	701	700	699	698	697	696	695	694	693	692	691	690	689	688	687	686	685	684	683	682	681	680	679	678	677	676	675	674	673	672	671	670	669	668	667	666	665	664	663	662	661	660	659	658	657	656	655	654	653	652	651	650	649	648	647	646	645	644	643	642	641	640	639	638	637	636	635	634	633	632	631	630	629	628	627	626	625	624	623	622	621	620	619	618	617	616	615	614	613	612	611	610	609	608	607	606	605	604	603	602	601	600	599	598	597	596	595	594	593	592	591	590	589	588	587	586	585	584	583	582	581	580	579	578	577	576	575	574	
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## INVESTMENT TRUSTS - Cont.

Notes	Price	1993	1992	1991	1990	1989	1988	1987	1986	1985	1984	1983	1982	1981	1980	1979	1978	1977	1976	1975	1974	1973	1972	1971	1970	1969	1968	1967	1966	1965	1964	1963	1962	1961	1960	1959	1958	1957	1956	1955	1954	1953	1952	1951	1950	1949	1948	1947	1946	1945	1944	1943	1942	1941	1940	1939	1938	1937	1936	1935	1934	1933	1932	1931	1930	1929	1928	1927	1926	1925	1924	1923	1922	1921	1920	1919	1918	1917	1916	1915	1914	1913	1912	1911	1910	1909	1908	1907	1906	1905	1904	1903	1902	1901	1900	1899	1898	1897	1896	1895	1894	1893	1892	1891	1890	1889	1888	1887	1886	1885	1884	1883	1882	1881	1880	1879	1878	1877	1876	1875	1874	1873	1872	1871	1870	1869	1868	1867	1866	1865	1864	1863	1862	1861	1860	1859	1858	1857	1856	1855	1854	1853	1852	1851	1850	1849	1848	1847	1846	1845	1844	1843	1842	1841	1840	1839	1838	1837	1836	1835	1834	1833	1832	1831	1830	1829	1828	1827	1826	1825	1824	1823	1822	1821	1820	1819	1818	1817	1816	1815	1814	1813	1812	1811	1810	1809	1808	1807	1806	1805	1804	1803	1802	1801	1800	1799	1798	1797	1796	1795	1794	1793	1792	1791	1790	1789	1788	1787	1786	1785	1784	1783	1782	1781	1780	1779	1778	1777	1776	1775	1774	1773	1772	1771	1770	1769	1768	1767	1766	1765	1764	1763	1762	1761	1760	1759	1758	1757	1756	1755	1754	1753	1752	1751	1750	1749	1748	1747	1746	1745	1744	1743	1742	1741	1740	1739	1738	1737	1736	1735	1734	1733	1732	1731	1730	1729	1728	1727	1726	1725	1724	1723	1722	1721	1720	1719	1718	1717	1716	1715	1714	1713	1712	1711	1710	1709	1708	1707	1706	1705	1704	1703	1702	1701	1700	1699	1698	1697	1696	1695	1694	1693	1692	1691	1690	1689	1688	1687	1686	1685	1684	1683	1682	1681	1680	1679	1678	1677	1676	1675	1674	1673	1672	1671	1670	1669	1668	1667	1666	1665	1664	1663	1662	1661	1660	1659	1658	1657	1656	1655	1654	1653	1652	1651	1650	1649	1648	1647	1646	1645	1644	1643	1642	1641	1640	1639	1638	1637	1636	1635	1634	1633	1632	1631	1630	1629	1628	1627	1626	1625	1624	1623	1622	1621	1620	1619	1618	1617	1616	1615	1614	1613	1612	1611	1610	1609	1608	1607	1606	1605	1604	1603	1602	1601	1600	1599	1598	1597	1596	1595	1594	1593	1592	1591	1590	1589	1588	1587	1586	1585	1584	1583	1582	1581	1580	1579	1578	1577	1576	1575	1574	1573	1572	1571	1570	1569	1568	1567	1566	1565	1564	1563	1562	1561	1560	1559	1558	1557	1556	1555	1554	1553	1552	1551	1550	1549	1548	1547	1546	1545	1544	1543	1542	1541	1540	1539	1538	1537	1536	1535	1534	1533	1532	1531	1530	1529	1528	1527	1526	1525	1524	1523	1522	1521	1520	1519	1518	1517	1516	1515	1514	1513	1512	1511	1510	1509	1508	1507	1506	1505	1504	1503	1502	1501	1500	1499	1498	1497	1496	1495	1494	1493	1492	1491	1490	1489	1488	1487	1486	1485	1484	1483	1482	1481	1480	1479	1478	1477	1476	1475	1474	1473	1472	1471	1470	1469	1468	1467	1466	1465	1464	1463	1462	1461	1460	1459	1458	1457	1456	1455	1454	1453	1452	1451	1450	1449	1448	1447	1446	1445	1444	1443	1442	1441	1440	1439	1438	1437	1436	1435	1434	1433	1432	1431	1430	1429	1428	1427	1426	1425	1424	1423	1422	1421	1420	1419	1418	1417	1416	1415	1414	1413	1412	1411	1410	1409	1408	1407	1406	1405	1404	1403	1402	1401	1400	1399	1398	1397	1396	1395	1394	1393	1392	1391	1390	1389	1388	1387	1386	1385	1384	1383	1382	1381	1380	1379	1378	1377	1376	1375	1374	1373	1372	1371	1370	1369	1368	1367	1366	1365	1364	1363	1362	1361	1360	1359	1358	1357	1356	1355	1354	1353	1352	1351	1350	1349	1348	1347	1346	1345	1344	1343	1342	1341	1340	1339	1338	1337	1336	1335	1334	1333	1332	1331	1330	1329	1328	1327	1326	1325	1324	1323	1322	1321	1320	1319	1318	1317	1316	1315	1314	1313	1312	1311	1310	1309	1308	1307	1306	1305	1304	1303	1302	1301	1300	1299	1298	1297	1296	1295	1294	1293	1292	1291	1290	1289	1288	1287	1286	1285	1284	1283	1282	1281	1280	1279	1278	1277	1276	1275	1274	1273	1272	1271	1270	1269	1268	1267	1266	1265	1264	1263	1262	1261	1260	1259	1258	1257	1256	1255	1254	1253	1252	1251	1250	1249	1248	1247	1246	1245	1244	1243	1242	1241	1240	1239	1238	1237	1236	1235	1234	1233	1232	1231	1230	1229	1228	1227	1226	1225	1224	1223	1222	1221	1220	1219	1218	1217	1216	1215	1214	1213	1212	1211	1210	1209	1208	1207	1206	1205	1204	1203	1202	1201	1200	1199	1198	1197	1196	1195	1194	1193	1192	1191	1190	1189	1188	1187	1186	1185	1184	1183	1182	1181	1180	1179	1178	1177	1176	1175	1174	1173	1172	1171	1170	1169	1168	1167	1166	1165	1164	1163	1162	1161	1160	1159	1158	1157	1156	1155	1154	1153	1152	1151	1150	1149	1148	1147	1146	1145	1144	1143	1142	1141	1140	1139	1138	1137	1136	1135	1134	1133	1132	1131	1130	1129	1128	1127	1126	1125	1124	1123	1122	1121	1120	1119	1118	1117	1116	1115	1114	1113	1112	1111	1110	1109	1108	1107	1106	1105	1104	1103	1102	1101	1100	1099	1098	1097	1096	1095	1094	1093	1092	1091	1090	1089	1088	1087	1086	1085	1084	1083	1082	1081	1080	1079	1078	1077	1076	1075	1074	1073	1072	1071	1070	1069	1068	1067	1066	1065	1064	1063	1062	1061	1060	1059	1058	1057	1056	1055	1054	1053	1052	1051	1050	1049	1048	1047	1046	1045	1044	1043	1042	1041	1040	1039	1038	1037	1036	1035	1034	1033	1032	1031	1030	1029	1028	1027	1026	1025	1024	1023	1022	1021	1020	1019	1018	1017	1016	1015	1014	1013	1012	1011	1010	1009	1008	1007	1006	1005	1004	1003	1002	1001	1000	999	998	997	996	99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● FT Cityline Unit Trust Prices are available over the telephone. Call the FT Cityline Help Desk on (971) 873-4378 for more details.

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### MANAGED FUNDS NOTES

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## CURRENCIES AND MONEY

## MARKETS REPORT

## Elections boost lira

THE ITALIAN Lira moved safely above last week's lows in European trading yesterday, as markets reacted well to the news that leftwing alliances won control of Italy's main cities in the second round of voting in local elections, writes Emma Tucker.

For most of the day the currency was steady at L991.60 against the D-Mark, closing slightly higher at L993.60 compared with Friday's L993.5.

Last week the Lira dropped as low as L1,000 to the D-Mark, but foreign exchange dealers said the local election results, which suggested Italy's political extremists had been held in check, had allowed the currency to regain some strength.

In a letter to the Italian Treasury yesterday, the International Monetary Fund said the Lira could recover some of its recent depreciation once the political situation becomes clearer.

"The decline of the lira since September 1992 has clearly gone beyond that deemed appropriate by the authorities," the IMF said in its letter.

It added that Italy's progress towards European Monetary Union should "take place mostly through a nominal appreciation of the lira from the current low, rather than through an inflation differential".

Italian government bond futures also took heart from the election results which were widely interpreted as a signal of greater political stability. The December contract rose almost 1/4 points on the day.

Still basking in the wake of Kenneth Clarke's budget, the pound ended the day slightly down on Friday's close although early trading saw it push briefly through the DM2.500 level.

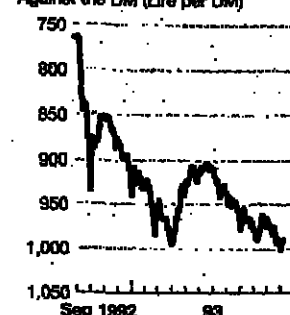
Many analysts said the pound was unlikely to be able to move much higher than this as the market is looking for another reduction in UK interest rates, and the higher sterling goes, the sooner the cut is likely to come.

Mr Jonathan Hoffman at Credit Suisse First Boston said the markets believed a further cut could come within the next two weeks.

"The RPI figures next week

## Lira

Against the DM (Lira per DM)



Source: FT Graphix

Dec 6 - Latest - Prev. close -

1 year - 1.4868 - 1.4868

1 month - 1.4868 - 1.4868

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## POUND SPOT FORWARD AGAINST THE POUND

remained ample as banks continued for this week's repo funds, allocated tomorrow, before building reserves.	France (Ffr)	7.8550	-0.0025	800	900	8.8130	8.7916	8.7874	-1.7	8.8144	-1.3	8.8417	-0.8	107.0
	Germany (DM)	2.8575	-0.0075	550	600	2.8560	2.9545	2.9502	-1.1	2.9505	-0.9	2.9561	-0.9	123.0
	Greece (Dr)	307.25	-	-	-	307.25	-	-	-	-	-	-	-	96.0
	Ireland (Ir£)	1.0250	-	-	-	1.0250	-	-	-	-	-	-	-	98.0
	Italy (Lira)	2631.75	-1.15	125	225	2659.00	2624.15	2640.05	-3.9	2654.75	-3.6	2617.7	-3.4	75.0
	Luxembourg (Lfr)	63.25	-0.7	320	330	54.10	53.20	53.38	-2.9	53.35	-2.3	53.98	-1.4	113.0
	Netherlands (Gld)	0.0026	-0.0005	575	600	2.6775	2.6925	2.6925	-0.2	2.6910	-0.5	2.6707	-0.1	110.0
	Norway (Nkr)	11.0225	-0.06	575	575	11.1420	11.0570	11.0397	-0.7	11.0725	-0.4	11.0227	-0.4	85.0
	Portugal (Esc)	261.00	-1	050	150	262.55	260.50	262.44	-4.6	264.775	-5.3	-	-	102.0
	Spain (Ptas)	210.50	-0.45	045	075	211.10	210.45	211.44	-4.8	212.84	-3.9	217.7	-3.4	84.0
	Sweden (Skr)	12.4675	-0.05	675	725	12.4675	12.4675	12.4675	-1.9	12.5255	-1.9	12.5255	-1.4	73.0
	Switzerland (Sfr)	2.2305	-0.0175	675	075	2.2300	2.1975	2.2011	0.8	2.1979	0.4	2.1797	1.2	82.0
	UK (£)	1.3275	-0.004	270	280	1.3335	1.3345	1.3292	-1.5	1.3317	-1.3	1.3365	-0.7	116.0
	USA (\$)	0.69097	-	-	-	-	-	-	-	-	-	-	-	98.0
● The Bundesbank announced after its council meeting last Thursday that the next five two-week repo tenders would be at a fixed rate of 6 per cent after last week's 6.25 per cent pace.	Americas (Pesc)	1.4875	-0.019	970	980	1.4900	1.4880	-	-	-	-	-	-	91.0
	Argentina (A\$)	374.85	-0.78	360	370	374.00	368.00	-	-	-	-	-	-	91.0
	Brazil (R\$)	1.9845	-0.0085	985	995	1.9845	-	1.9883	1.3	1.983	1.1	1.9788	0.5	91.0
	Mexico (Mex Pes)	4.8500	-0.0355	575	625	4.8625	4.8320	-	-	-	-	-	-	91.0
	USA (Pesc)	1.4900	-0.0055	985	995	1.5020	1.4920	1.4965	2.0	1.4824	1.8	1.4815	1.2	66.0
● The Bank of Portugal cut its regular market portfolio intervention rates by ½ point to 10.125 per cent for draining liquidity and 11.125 per cent for injecting funds at the start of a new seven-day accounting period for commercial bank cash reserves.	West/Middle East/Africa (A\$)	0.0026	-0.015	400	410	2.2240	2.2200	2.2293	0.7	2.2374	0.8	2.2372	0.1	101.0
	Australia (A\$)	11.5500	-0.08	925	935	11.6005	11.5255	11.5382	1.6	11.5472	1.8	11.4618	1.9	101.0
	Hong Kong (Hk\$)	47.05	-0.25	700	710	47.10	46.80	-	-	-	-	-	-	101.0
	Japan (Yen)	181.00	-0.3	050	150	182.55	181.00	180.55	3.4	159.71	3.2	155.95	3.1	181.0
	Malaysia (RM)	9.5515	-0.05	500	510	9.5515	-	9.5525	-	-	-	-	-	101.0
	New Zealand (NZ\$)	2.7320	-0.0185	305	335	2.7335	2.7185	2.7327	-0.3	2.7339	-0.3	2.744	-0.4	101.0
	Philippines (Peso)	40.50	-0.05	045	055	40.45	40.40	-	-	-	-	-	-	101.0
	South Africa (Rand)	5.8500	-0.0075	295	305	5.8356	5.8988	-	-	-	-	-	-	101.0
	South Korea (Won)	40.40	-0.0125	695	705	40.40	-	40.40	-	-	-	-	-	101.0
	Saudi Arabia (S.A. Com.)	5.0445	-0.0018	460	480	5.0490	5.0222	-	-	-	-	-	-	101.0
	South Korea (S.A. Com. Fin.)	6.5720	-0.0043	845	795	6.5795	6.6220	-	-	-	-	-	-	101.0
	South Africa (Rand)	1214.15	-0.25	365	445	1214.65	1207.20	-	-	-	-	-	-	101.0
	Taiwan (Nt\$)	40.40	-0.1	035	045	40.45	40.45	-	-	-	-	-	-	101.0
	Thailand (Baht)	38.20	-0.3	815	825	38.25	37.50	-	-	-	-	-	-	101.0

TSR rate for Dec 6, \$Bdollar for prices in the Pound spot table shown only the last three decimal places. Forward rates are not directly quoted to the market.



## WORLD STOCK MARKETS

EUROPE									
Index	Dec 6	Dec 5	Dec 4	Dec 3	Dec 2	Dec 1	Dec 30	Dec 29	Dec 28
FTSE 100	2,700.00	2,680.00	2,650.00	2,620.00	2,590.00	2,560.00	2,530.00	2,500.00	2,470.00
DAX	1,800.00	1,780.00	1,750.00	1,720.00	1,690.00	1,660.00	1,630.00	1,600.00	1,570.00
CAC 40	1,500.00	1,480.00	1,450.00	1,420.00	1,390.00	1,360.00	1,330.00	1,300.00	1,270.00
IBEX 35	1,200.00	1,180.00	1,150.00	1,120.00	1,090.00	1,060.00	1,030.00	1,000.00	970.00
ATX	1,000.00	980.00	950.00	920.00	890.00	860.00	830.00	800.00	770.00
PSI	800.00	780.00	750.00	720.00	690.00	660.00	630.00	600.00	570.00
STOXX 50	600.00	580.00	550.00	520.00	490.00	460.00	430.00	400.00	370.00
FTSE 200	1,500.00	1,480.00	1,450.00	1,420.00	1,390.00	1,360.00	1,330.00	1,300.00	1,270.00
FTSE 300	1,200.00	1,180.00	1,150.00	1,120.00	1,090.00	1,060.00	1,030.00	1,000.00	970.00
FTSE 400	1,000.00	980.00	950.00	920.00	890.00	860.00	830.00	800.00	770.00
FTSE 500	800.00	780.00	750.00	720.00	690.00	660.00	630.00	600.00	570.00
FTSE 600	600.00	580.00	550.00	520.00	490.00	460.00	430.00	400.00	370.00
FTSE 700	400.00	380.00	350.00	320.00	290.00	260.00	230.00	200.00	170.00
FTSE 800	200.00	180.00	150.00	120.00	90.00	60.00	30.00	0.00	-30.00
FTSE 900	100.00	80.00	50.00	20.00	-10.00	-40.00	-70.00	-100.00	-130.00
FTSE 1000	50.00	30.00	0.00	-30.00	-60.00	-90.00	-120.00	-150.00	-180.00
FTSE 1100	20.00	0.00	-30.00	-60.00	-90.00	-120.00	-150.00	-180.00	-210.00
FTSE 1200	10.00	-10.00	-40.00	-70.00	-100.00	-130.00	-160.00	-190.00	-220.00
FTSE 1300	5.00	-5.00	-35.00	-65.00	-95.00	-125.00	-155.00	-185.00	-215.00
FTSE 1400	2.50	-2.50	-32.50	-62.50	-92.50	-122.50	-152.50	-182.50	-212.50
FTSE 1500	1.25	-1.25	-31.25	-61.25	-91.25	-121.25	-151.25	-181.25	-211.25
FTSE 1600	0.625	-0.625	-30.625	-60.625	-90.625	-120.625	-150.625	-180.625	-210.625
FTSE 1700	0.3125	-0.3125	-29.3125	-59.3125	-89.3125	-119.3125	-149.3125	-179.3125	-209.3125
FTSE 1800	0.15625	-0.15625	-28.15625	-58.15625	-88.15625	-118.15625	-148.15625	-178.15625	-208.15625
FTSE 1900	0.078125	-0.078125	-27.078125	-57.078125	-87.078125	-117.078125	-147.078125	-177.078125	-207.078125
FTSE 2000	0.0390625	-0.0390625	-26.0390625	-56.0390625	-86.0390625	-116.0390625	-146.0390625	-176.0390625	-206.0390625
FTSE 2100	0.01953125	-0.01953125	-25.01953125	-55.01953125	-85.01953125	-115.01953125	-145.01953125	-175.01953125	-205.01953125
FTSE 2200	0.009765625	-0.009765625	-24.009765625	-54.009765625	-84.009765625	-114.009765625	-144.009765625	-174.009765625	-204.009765625
FTSE 2300	0.0048828125	-0.0048828125	-23.0048828125	-53.0048828125	-83.0048828125	-113.0048828125	-143.0048828125	-173.0048828125	-203.0048828125
FTSE 2400	0.00244140625	-0.00244140625	-22.00244140625	-52.00244140625	-82.00244140625	-112.00244140625	-142.00244140625	-172.00244140625	-202.00244140625
FTSE 2500	0.001220703125	-0.001220703125	-21.001220703125	-51.001220703125	-81.001220703125	-111.001220703125	-141.001220703125	-171.001220703125	-201.001220703125
FTSE 2600	0.0006103515625	-0.0006103515625	-20.0006103515625	-50.0006103515625	-80.0006103515625	-110.0006103515625	-140.0006103515625	-170.0006103515625	-200.0006103515625
FTSE 2700	0.00030517578125	-0.00030517578125	-19.00030517578125	-49.00030517578125	-79.00030517578125	-109.00030517578125	-139.00030517578125	-169.00030517578125	-199.00030517578125
FTSE 2800	0.000152587890625	-0.000152587890625	-18.000152587890625	-48.000152587890625	-78.000152587890625	-108.000152587890625	-138.000152587890625	-168.000152587890625	-198.000152587890625
FTSE 2900	7.629395625e-05	-7.629395625e-05	-17.000152587890625	-47.000152587890625	-77.000152587890625	-107.000152587890625	-137.000152587890625	-167.000152587890625	-197.000152587890625
FTSE 3000	3.8146978125e-05	-3.8146978125e-05	-16.000152587890625	-46.000152587890625	-76.000152587890625	-106.000152587890625	-136.000152587890625	-166.000152587890625	-196.000152587890625
FTSE 3100	1.90734890625e-05	-1.90734890625e-05	-15.000152587890625	-45.000152587890625	-75.000152587890625	-105.000152587890625	-135.000152587890625	-165.000152587890625	-195.000152587890625
FTSE 3200	9.53674453125e-06	-9.53674453125e-06	-14.000152587890625	-44.000152587890625	-74.000152587890625	-104.000152587890625	-134.000152587890625	-164.000152587890625	-194.000152587890625
FTSE 3300	4.768372265625e-06	-4.768372265625e-06	-13.000152587890625	-43.000152587890625	-73.000152587890625	-103.000152587890625	-133.000152587890625	-163.000152587890625	-193.000152587890625
FTSE 3400	2.3841861328125e-06	-2.3841861328125e-06	-12.000152587890625	-42.000152587890625	-72.000152587890625	-102.000152587890625	-132.000152587890625	-162.000152587890625	-192.000152587890625
FTSE 3500	1.19209306640625e-06	-1.19209306640625e-06	-11.000152587890625	-41.000152587890625	-71.000152587890625	-101.000152587890625	-131.000152587890625	-161.000152587890625	-191.000152587890625
FTSE 3600	5.96046533203125e-07	-5.96046533203125e-07	-10.000152587890625	-40.000152587890625	-70.000152587890625	-100.000152587890625	-130.000152587890625	-160.000152587890625	-190.000152587890625
FTSE 3700	2.980232666015625e-07	-2.980232666015625e-07	-9.000152587890625	-39.000152587890625	-69.000152587890625	-99.000152587890625	-129.000152587890625	-159.000152587890625	-189.000152587890625
FTSE 3800	1.4901163330078125e-07	-1.4901163330078125e-07	-8.000152587890625	-38.000152587890625	-68.000152587890625	-98.000152587890625	-128.000152587890625	-158.000152587890625	-188.000152587890625
FTSE 3900	7.45058166501953125e-08	-7.45058166501953125e-08	-7.000152587890625	-37.000152587890625	-67.000152587890625	-97.000152587890625	-127.000152587890625	-157.000152587890625	-187.000152587890625
FTSE 4000	3.725290832509765625e-08	-3.725290832509765625e-08	-6.000152587890625	-36.000152587890625	-66.000152587890625	-96.000152587890625	-126.000152587890625	-156.000152587890625	-186.000152587890625
FTSE 4100	1.8626454162548828125e-08	-1.8626454162548828125e-08	-5.000152587890625	-35.000152587890625	-65.000152587890625	-95.000152587890625	-125.000152587890625	-155.000152587890625	-185.000152587890625
FTSE 4200	9.31322708127244140625e-09	-9.31322708127244140625e-09	-4.000152587890625	-34.000152587890625	-64.000152587890625	-94.000152587890625	-124.000152587890625	-154.000152587890625	-184.000152587890625
FTSE 4300	4.656613540636220703125e-09	-4.656613540636220703125e-09	-3.000152587890625	-33.000152587890625	-63.000152587890625	-93.000152587890625	-123.000152587890625	-153.000152587890625	-183.000152587890625
FTSE 4400	2.3283067703181103515625e-09	-2.3283067703181103515625e-09	-2.000152587890625	-32.000152587890625	-62.000152587890625	-92.000152587890625	-122.000152587890625	-152.000152587890625	-182.000152587890625
FTSE 4500	1.16415338515905517578125e-09	-1.16415338515905517578125e-09	-1.000152587890625	-31.000152587890625	-61.000152587890625	-91.000152587890625	-121.000152587890625	-151.000152587890625	-181.000152587890625
FTSE 4600	5.82076692579527587890625e-10	-5.82076692579527587890625e-10	-0.000152587890625	-30.000152587890625	-60.000152587890625	-90.000152587890625	-120.000152587890625	-150.000152587890625	-180.000152587890625
FTSE 4700	2.910383462897637939453125e-10	-2.910383462897637939453125e-10	0.000152587890625	-29.000152587890625	-59.000152587890625	-89.000152587890625	-119.000152587890625	-149.000152587890625	-179.000152587890625
FTSE 4800	1.4551917314488189697265625e-10	-1.4551917314488189697265625e-10	0.000152587890625	-28.000152587890625	-58.000152587890625	-88.000152587890625	-118.000152587890625	-148.000152587890625	-178.000152587890625
FTSE 4900	7.275958657244094848828125e-11	-7.275958657244094848828125e-11	0.000152587890625	-27.000152587890625	-57.000152587890625	-87.000152587890625	-117.000152587890625	-147.000152587890625	-177.000152587890625
FTSE 5000	3.6379793286220474244140625e-11	-3.6379793286220474244140625e-11	0.000152587890625	-26.000152587890625	-56.000152587890625	-86.000152587890625	-116.000152587890625	-146.000152587890625	-176.000152587890625
FTSE 5100	1.81898966431102371220703125e-11	-1.81898966431102371220703125e-11	0.000152587890625	-25.000152587890625	-55.000152587890625	-85.000152587890625	-115.000152587890625	-145.000152587890625	-175.000152587890625
FTSE 5200	9.094948321555118613540625e-12	-9.094948321555118613540625e-12	0.000152587890625	-24.000152587890625	-54.000152587890625	-84.000152587890625	-114.000152587890625	-144.000152587890625	-174.000152587890625
FTSE 5300	4.5474741607775593067703125e-12	-4.5474741607775593067703125e-12	0.000152587890625	-23.000152587890625	-53.000152587890625	-83.000152587890625	-113.000152587890625	-143.000152587890625	-173.000152587890625
FTSE 5400	2.27373708038877965338515625e-12	-2.27373708038877965338515625e-12	0.000152587890625	-22.000152587890625	-52.000152587890625	-82.000152587890625	-112.000152587890625	-142.000152587890625	-172.000152587890625
FTSE 5500	1.136868540194389826692578125e-12	-1.136868540194389826692578125e-12	0.000152587890625	-21.000152587890625	-51.000152587890625	-81.000152587890625	-111.000152587890625	-141.000152587890625	-171.000152587890625
FTSE 5600	5.684342700971949133461328125e-13	-5.684342700971949133461328125e-13	0.000152587890625	-20.000152587890625	-50.000152587890625	-80.000152587890625	-110.000152587890625	-140.000152587890625	-170.000152587890625
FTSE 5700	2.8421713504859745667306640625e-13	-2.8421713504859745667306640625e-13	0.000152587890625	-19.000152587890625	-49.000152587890625	-79.000152587890625	-109.000152587890625	-139.000152587890625	-169.000152587890625
FTSE 5800	1.42108567524298728336533203125e-13	-1.42108567524298728336533203125e-13	0.000152587890625	-18.000152587890625	-48.000152587890625	-78.000152587890625	-108.000152587890625	-138.000152587890625	-168.000152587890625
FTSE 5900	7.10542								



## NEW YORK STOCK EXCHANGE COMPOSITE PRICES

*-I am close December 6*

[illegible]



## NYSE COMPOSITE PRICES

High Low Stock										High Low Stock										
Continued from previous page																				
254	16%	Refined S.								180	Low Stock									
255	13%	Shelby								35	25%	Highgate	1.40	4.12	22.20	31	30%	30%		
256	13%	Shelby	0.26	2.56	22.12	158	65			111	10	USLIFE Ins	1.28	6.85	4.9	5	10%	10%		
257	13%	Shelby	0.26	2.56	22.12	158	65			111	10	USLIFE Ins	1.28	6.85	4.9	5	10%	10%		
258	13%	Shelby	0.26	2.56	22.12	158	65			111	10	USLIFE Ins	1.28	6.85	4.9	5	10%	10%		
259	13%	Shelby	0.26	2.56	22.12	158	65			111	10	USLIFE Ins	1.28	6.85	4.9	5	10%	10%		
260	13%	Shelby	0.26	2.56	22.12	158	65			111	10	USLIFE Ins	1.28	6.85	4.9	5	10%	10%		
261	13%	Shelby	0.26	2.56	22.12	158	65			111	10	USLIFE Ins	1.28	6.85	4.9	5	10%	10%		
262	13%	Shelby	0.26	2.56	22.12	158	65			111	10	USLIFE Ins	1.28	6.85	4.9	5	10%	10%		
263	13%	Shelby	0.26	2.56	22.12	158	65			111	10	USLIFE Ins	1.28	6.85	4.9	5	10%	10%		
264	13%	Shelby	0.26	2.56	22.12	158	65			111	10	USLIFE Ins	1.28	6.85	4.9	5	10%	10%		
265	13%	Shelby	0.26	2.56	22.12	158	65			111	10	USLIFE Ins	1.28	6.85	4.9	5	10%	10%		
266	13%	Shelby	0.26	2.56	22.12	158	65			111	10	USLIFE Ins	1.28	6.85	4.9	5	10%	10%		
267	13%	Shelby	0.26	2.56	22.12	158	65			111	10	USLIFE Ins	1.28	6.85	4.9	5	10%	10%		
268	13%	Shelby	0.26	2.56	22.12	158	65			111	10	USLIFE Ins	1.28	6.85	4.9	5	10%	10%		
269	13%	Shelby	0.26	2.56	22.12	158	65			111	10	USLIFE Ins	1.28	6.85	4.9	5	10%	10%		
270	13%	Shelby	0.26	2.56	22.12	158	65			111	10	USLIFE Ins	1.28	6.85	4.9	5	10%	10%		
271	13%	Shelby	0.26	2.56	22.12	158	65			111	10	USLIFE Ins	1.28	6.85	4.9	5	10%	10%		
272	13%	Shelby	0.26	2.56	22.12	158	65			111	10	USLIFE Ins	1.28	6.85	4.9	5	10%	10%		
273	13%	Shelby	0.26	2.56	22.12	158	65			111	10	USLIFE Ins	1.28	6.85	4.9	5	10%	10%		
274	13%	Shelby	0.26	2.56	22.12	158	65			111	10	USLIFE Ins	1.28	6.85	4.9	5	10%	10%		
275	13%	Shelby	0.26	2.56	22.12	158	65			111	10	USLIFE Ins	1.28	6.85	4.9	5	10%	10%		
276	13%	Shelby	0.26	2.56	22.12	158	65			111	10	USLIFE Ins	1.28	6.85	4.9	5	10%	10%		
277	13%	Shelby	0.26	2.56	22.12	158	65			111	10	USLIFE Ins	1.28	6.85	4.9	5	10%	10%		
278	13%	Shelby	0.26	2.56	22.12	158	65			111	10	USLIFE Ins	1.28	6.85	4.9	5	10%	10%		
279	13%	Shelby	0.26	2.56	22.12	158	65			111	10	USLIFE Ins	1.28	6.85	4.9	5	10%	10%		
280	13%	Shelby	0.26	2.56	22.12	158	65			111	10	USLIFE Ins	1.28	6.85	4.9	5	10%	10%		
281	13%	Shelby	0.26	2.56	22.12	158	65			111	10	USLIFE Ins	1.28	6.85	4.9	5	10%	10%		
282	13%	Shelby	0.26	2.56	22.12	158	65			111	10	USLIFE Ins	1.28	6.85	4.9	5	10%	10%		
283	13%	Shelby	0.26	2.56	22.12	158	65			111	10	USLIFE Ins	1.28	6.85	4.9	5	10%	10%		
284	13%	Shelby	0.26	2.56	22.12	158	65			111	10	USLIFE Ins	1.28	6.85	4.9	5	10%	10%		
285	13%	Shelby	0.26	2.56	22.12	158	65			111	10	USLIFE Ins	1.28	6.85	4.9	5	10%	10%		
286	13%	Shelby	0.26	2.56	22.12	158	65			111	10	USLIFE Ins	1.28	6.85	4.9	5	10%	10%		
287	13%	Shelby	0.26	2.56	22.12	158	65			111	10	USLIFE Ins	1.28	6.85	4.9	5	10%	10%		
288	13%	Shelby	0.26	2.56	22.12	158	65			111	10	USLIFE Ins	1.28	6.85	4.9	5	10%	10%		
289	13%	Shelby	0.26	2.56	22.12	158	65			111	10	USLIFE Ins	1.28	6.85	4.9	5	10%	10%		
290	13%	Shelby	0.26	2.56	22.12	158	65			111	10	USLIFE Ins	1.28	6.85	4.9	5	10%	10%		
291	13%	Shelby	0.26	2.56	22.12	158	65			111	10	USLIFE Ins	1.28	6.85	4.9	5	10%	10%		
292	13%	Shelby	0.26	2.56	22.12	158	65			111	10	USLIFE Ins	1.28	6.85	4.9	5	10%	10%		
293	13%	Shelby	0.26	2.56	22.12	158	65			111	10	USLIFE Ins	1.28	6.85	4.9	5	10%	10%		
294	13%	Shelby	0.26	2.56	22.12	158	65			111	10	USLIFE Ins	1.28	6.85	4.9	5	10%	10%		
295	13%	Shelby	0.26	2.56	22.12	158	65			111	10	USLIFE Ins	1.28	6.85	4.9	5	10%	10%		
296	13%	Shelby	0.26	2.56	22.12	158	65			111	10	USLIFE Ins	1.28	6.85	4.9	5	10%	10%		
297	13%	Shelby	0.26	2.56	22.12	158	65			111	10	USLIFE Ins	1.28	6.85	4.9	5	10%	10%		
298	13%	Shelby	0.26	2.56	22.12	158	65			111	10	USLIFE Ins	1.28	6.85	4.9	5	10%	10%		
299	13%	Shelby	0.26	2.56	22.12	158	65			111	10	USLIFE Ins	1.28	6.85	4.9	5	10%	10%		
300	13%	Shelby	0.26	2.56	22.12	158	65			111	10	USLIFE Ins	1.28	6.85	4.9	5	10%	10%		
301	13%	Shelby	0.26	2.56	22.12	158	65			111	10	USLIFE Ins	1.28	6.85	4.9	5	10%	10%		
302	13%	Shelby	0.26	2.56	22.12	158	65			111	10	USLIFE Ins	1.28	6.85	4.9	5	10%	10%		
303	13%	Shelby	0.26	2.56	22.12	158	65			111	10	USLIFE Ins	1.28	6.85	4.9	5	10%	10%		
304	13%	Shelby	0.26	2.56	22.12	158	65			111	10	USLIFE Ins	1.28	6.85	4.9	5	10%	10%		
305	13%	Shelby	0.26	2.56	22.12	158	65			111	10	USLIFE Ins	1.28	6.85	4.9	5	10%	10%		
306	13%	Shelby	0.26	2.56	22.12	158	65			111	10	USLIFE Ins	1.28	6.85	4.9	5	10%	10%		
307	13%	Shelby	0.26	2.56	22.12	158	65			111	10	USLIFE Ins	1.28	6.85	4.9	5	10%	10%		
308	13%	Shelby	0.26	2.56	22.12	158	65			111	10	USLIFE Ins	1.28	6.85	4.9	5	10%	10%		
309	13%	Shelby	0.26	2.56	22.12	158	65			111	10	USLIFE Ins	1.28	6.85	4.9	5	10%	10%		
310	13%	Shelby	0.26	2.56	22.12	158	65			111	10	USLIFE Ins	1.28	6.85	4.9	5	10%	10%		
311	13%	Shelby	0.26	2.56	22.12	158	65			111	10	USLIFE Ins	1.28	6.85	4.9	5	10%	10%		
312	13%	Shelby	0.26	2.56	22.12	158	65			111	10	USLIFE Ins	1.28	6.85	4.9	5	10%	10%		
313	13%	Shelby	0.26	2.56	22.12	158	65			111	10	USLIFE Ins	1.28	6.85	4.9	5	10%	10%		
314	13%	Shelby	0.26	2.56	22.12	158	65			111	10	USLIFE Ins	1.28	6.85	4.9	5	10%	10%		
315	13%	Shelby	0.26	2.56	22.12	158	65			111	10	USLIFE Ins	1.28	6.85	4.9	5	10%	10%		
316	13%	Shelby	0.26	2.56	22.12	158	65			111	10	USLIFE Ins	1.28	6.85	4.9	5	10%	10%		
317	13%	Shelby	0.26	2.56	22.12	158	65			111	10	USLIFE Ins	1.28	6.85	4.9	5	10%	10%		
318	13%	Shelby	0.26	2.56	22.12	158	65			111	10	USLIFE Ins	1.28	6.85	4.9	5	10%	10%		
319	13%	Shelby	0.26	2.56	22.12	158	65			111	10	USLIFE Ins	1.28	6.85	4.9	5	10%	10%		
320	13%	Shelby	0.26	2.56	22.12	158	65			111	10	USLIFE Ins	1.28	6.85	4.9	5	10%	10%		
321	13%	Shelby	0.26	2.56	22.12	158	65			111	10	USLIFE Ins	1.28	6.85	4.9	5	10%	10%		
322	13%	Shelby	0.26	2.56	22.12	158	65			111	10	USLIFE Ins	1.28	6.85	4.9	5	10%	10%		
323	13%	Shelby	0.26	2.56	22.12	158	65			111	10	USLIFE Ins	1.28	6.85	4.9	5	10%	10%		
324	13%	Shelby	0.26	2.56	22.12	158	65			111	10	USLIFE Ins	1.28	6.85	4.9	5	10%	10%		
325	13%	Shelby	0.26	2.56	22.12	158	65			111	10	USLIFE Ins	1.28	6.85	4.9	5	10%	10%		
326	13%	Shelby	0.26	2.56	22.12	158	65			111	10	USLIFE Ins	1.28	6.85	4.9	5	10%	10%		
327	13%	Shelby	0.26	2.56	22.12	158	65			111	10	USLIFE Ins	1.28	6.85	4.9	5	10%	10%		
328	13%	Shelby	0.26	2.56	22.12	158	65			111	10	USLIFE Ins	1.28	6.85	4.9	5	10%	10%		
329	13%	Shelby	0.26	2.56	22.12	158	65			111	10	USLIFE Ins	1.28	6.85	4.9	5	10%	10%		
330	13%	Shelby	0.26	2.56	22.12	158	65			111	10	USLIFE Ins	1.28	6.85	4.9	5	10%	10%		
331	13%	Shelby	0.26	2.56	22.12	158	65			111	10	USLIFE Ins	1.28	6.85	4.9	5	10%	10%		
332	13%	Shelby	0.26	2.56	22.12	158	65			111	10	USLIFE Ins	1.28	6.85	4.9	5	10%	10%		
333	13%	Shelby	0.26	2.56	22.12															

**NASDAQ NATIONAL MARKET**[illegible]**AMEX COMPOSITE PRICE**[illegible]

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AMERICA

Growth hopes take Dow to record high

Wall Street

US blue-chip stocks climbed to record levels yesterday morning, buoyed by last week's batch of strong economic data and a steady bond market, writes Frank McGurty in New York.

By 1 pm, the Dow Jones Industrial Average was 15,922, up 17.18 points, or 0.11 per cent, from 15,904.83, the all-time closing high of 3,710.77 reached on November 16. The more broadly based Standard & Poor's 500 gained 1.80 to 466.62, while the American SE composite was up 0.21 to 465.53. However, a sell-off in technology issues dragged the

Mexican stocks continued their record breaking ways, the IFC index adding 46.90 to 2,370.99 by midsession.

Investors have been encouraged by reports that two major rating agencies could lift the country's investment ratings, which currently stands at BB+. Telmex led buying activity, with US gains lifting the local stock by 2.3 per cent.

Nasdaq composite 3.16 lower to 769.06.

Activity on the NYSE was moderately strong with 1,600 shares traded by 1 pm. Advancing issues were leading declines by 1,135 to 833.

With no fresh economic indicators to offer direction, investors had an opportunity to digest last week's flurry of news, most of which pointed to strong, non-inflationary growth. The picture that emerged was particularly favourable for those companies whose performances are most closely linked to broad economic trends. The optimism quickly translated into big gains in the Dow industrial average yesterday morning.

The bond market, which continued to weather the economic tide with surprising resilience, reinforced the positive sentiment in equities. By

EUROPE

Budget approval prospects leave Milan up 2.6%

Bourses moved on a variety of influences, and mostly higher, writes Our Markets Staff, although both Frankfurt and Paris seemed to have run out of impetus.

MILAN advanced 2.6 per cent with the bulk of the buying coming from domestic investors, reassured by signs that parliamentary approval of the budget was on track and with the results of the local elections providing no surprises. The Comit index added 14.31 or 2.6 per cent to 564.15.

Credito Italiano shed 1.50 to 12,256; however, expectations of a heavy oversubscription for the issue held the shares well above the 12,075 privatisation price, announced on Saturday.

Fiat rose 1.22 or 5.8 per cent to 14,200 in heavy volume of 23.2m shares. News of higher sales in November provided limited impetus, analysts suggesting that the share price, constrained throughout the group's capital raising exercise, was now catching up with the strong performances of

European competitors over the last two months.

Generali, a loser last week, bounced 11.42 or 2.8 per cent higher to 127,990 as investors, once again, focused on prospects for good annual results from the insurance sector.

FRANKFURT tried to build on last week's rally, the DAX index hitting a record intraday high of 2,133.31, but there was no backup from buy orders and profit-taking came in.

The DAX ended 1.81 lower at 2,131.80, turnover easing from DM9.1bn to DM8.9bn. At the heavier end of the corporate economy, Metallgesellschaft dropped DM46, or 11.7 per cent to DM346.50 as Kugelfischer, the ball bearing manufacturer, recovered DM11.50, or 8 per cent to DM156.

Kugelfischer has more than doubled from its 1993 low of DM77; yesterday saw news that its operating losses had declined, and prospects had improved further as a result of a restructuring programme.

Metallgesellschaft reported

FT-SE Actuaries Share Indices

Dec 6		Open		10.30		11.00		12.00		13.00		14.00		15.00		Close	
Dec 6	FT-SE 100	1384.33	1386.37	1386.37	1386.37	1386.37	1386.37	1386.37	1386.37	1386.37	1386.37	1386.37	1386.37	1386.37	1386.37	1386.37	1386.37
Dec 6	FT-SE 250	1450.00	1452.16	1452.16	1452.16	1452.16	1452.16	1452.16	1452.16	1452.16	1452.16	1452.16	1452.16	1452.16	1452.16	1452.16	1452.16

heavy losses, and passed its dividend less than a fortnight ago. Combining commodities trading with environmental technology, and more obviously vulnerable to metal prices, the company was forced yesterday to acknowledge massive margin payments, and a liquidity bottleneck after the slump in crude oil prices in recent weeks.

In electricals, meanwhile, AEG declined comment on speculation that it was planning to sell its household appliance group to Electrolux of Sweden. The shares rose DM5.40 to DM18.40.

AMSTERDAM was satisfied

with Abold's third quarter rise in profits and the retailer's shares added 10 cents to F145.80, off a day's high of F146.20. The CBS Tendency index put on 0.7 to 128.7.

Begemann, the engineering concern, gained F1.30 to F146.30 after announcing that it planned to raise F130m through a convertible bond issue.

ZURICH continued to benefit from last week's better than expected inflation and GDP data and the SMI index rose 17.4 to a fourth consecutive record high of 3,883.4.

Nestlé, the most actively traded stock, rose SF12 to SF121 after Friday's break through the SF120 level.

BRUSSELS set a new record high on technical factors and strength of the domestic currency. The Bel-20 index closed up 14.75 to 1,438.42.

Turnover was good at BF2.6bn.

Among the significant movers Electrolux climbed BF120 to BF135.50 and Tractebel BF225 to BF110.70.

PARIS did little during the session and the CAC-40 index closed just 1.66 points weaker at 2,186.74, having earlier seen a day's high of 2,196.72.

Turnover was estimated at some FF3.4bn.

In a review of the market, JP Morgan said that the recent underperformance of French equities has left the CAC undervalued in relation to the other major European centres; it saw good prospects for 1994, particularly in the consumer sector. The bank set an end-1994 target for the CAC-40 of 2,600.

ATHENS rose 1.6 per cent in heavy trading with the general index finishing above the 900 point level for the first time since late August, closing 14.13 points higher at 913.15.

The market was encouraged by the absence of taxes relating to equity investment when the government unveiled its new tax bill last Friday.

TEL AVIV spurred late in the session on last-minute buying, described by dealers as a correction after losses last week. The Mishtanim index gained 3.57, or 1.5 per cent to 241.77 on relatively low turnover of Shk318m.

WARSAW extended its latest bull run, the WIG index rising by 412.5, or 4.5 per cent to 9,585.3 in active turnover of 1,200bn zloty. Some brokers said that money frozen for the Bank Skalski offer could be returning to the market, following news that buyers would only get three shares each.

Written and edited by William Cochrane, John Pitt and Michael Morgan.

ASIA PACIFIC

Nikkei falls 3.5% on concern over stimulus package

Tokyo

Reports that the government will not announce additional stimulus measures before the passage of the supplementary budget through parliament discouraged investors, and the Nikkei average tumbled 3.5 per cent, falling through the 17,000 level for the first time in four trading days, writes Emiko Terazono in Tokyo.

The 235-issue average lost 618.97 to 16,340.38, its first decline in five trading days. The Toxip index dropped 48.25, or 3.2 per cent, to 1,413.86, and in London the ISE/Nikkei 50 index shed 2.99 to 1,438.82.

The Nikkei opened at the day's high of 17,325.14 but small-lot arbitrage selling depressed share prices after a fall in futures. The index hit the day's low of 16,783.48 just before the morning close, but resisted a further decline on encountering index-linked buying by investment trusts.

Volume fell to 220m shares from 271m. Declines overwhelmed advances by 1,020 to 74, with 61 issues unchanged.

Investors had hoped that the government would announce an emergency fiscal package to prop up the equity market, to income tax and land transaction taxes. However, Prime Minister Morihiro Hosokawa needs to clear other political issues before a decision on a new stimulus package can be reached. Meanwhile, Mr Hirohisa Fujii, the finance minister, reiterated that the government would not take steps to prop up the equity market.

The arrest of Mr Shigeru Sato, president of Kabuto Decora, a property developer listed on the over-the-counter section, also depressed sentiment. Prosecutors allege that Mr Sato forged commercial bills in the name of Kabuto's subsidiaries.

The Tokyo stock exchange suspended trading of Kabuto on the OTC market after the

reports. Hokkaido Takushoku Bank, Kabuto's main creditor, slipped Y35 to Y480.

Dai-ichi, a condominium developer, dropped Y84 to Y912 after Carolina, a real estate company listed on the second section, and in which Dai-ichi has the largest shareholding, announced that it was withdrawing from textile and agriculture operations. Carolina eased Y1 to Y309.

Banks declined on profit-taking. Sumitomo Bank relinquished Y60 to Y1,980 and Sakura Bank Y10 to Y1,560. Brokers were also weak, with Nomura Securities down Y30 to Y1,770 and Nikko Securities losing Y70 to Y1,690.

In Osaka, the OSE average plunged 24.86 to 18,694.88 in volume of 11.3m shares.

Roundup

The fall in Tokyo seemed to have little direct impact on the region's markets. Manila was closed due to a typhoon.

HONG KONG surged ahead 3.3 per cent on heavy foreign demand, in spite of rising friction between Britain and China. The Hang Seng index climbed 315.34 to 9,509.69 in turnover swollen to HK\$7.2bn from Friday's HK\$5.8bn.

Last week's decision by Governor Chris Patten to press ahead with a partial electoral bill, in spite of Chinese opposition, was viewed as removing a major source of uncertainty in the market.

The sharp rise was partly fuelled by surging index futures and a jump in the shares of HK Telecom, up 90 cents at HK\$15.60. December index futures added 400 to 9,785, for a premium of 175 points to the spot index.

The newly listed Consolidated Electric Power, Hopewell's power operations in China and the Philippines, finished at HK\$15.50, against a high of HK\$15.50 and its offer price of HK\$13.50. Hopewell was 20 cents ahead at HK\$15.65.

KUALA LUMPUR was driven to an all-time peak by heavy speculative demand prompted by rumours of takeovers and timber concessions. The composite index put on 17.15, or 1.7 per cent, to 1,041.11 in volume of 901.8m shares, the highest since October 28 when 909.2m was recorded, and compared with 633.5m last Friday.

Iris Hydraulic rose 40 cents to M\$6.20 amid talk that it had secured a timber concession deal in Burma.

KARACHI advanced to a two-year high on renewed foreign demand when the market reopened after a three-day break. The KSE 100-share index added 16.46 to 1,791.40.

SEOUL moved ahead for the third straight session, with continuing demand for blue chip manufacturers outweighing institutional sales of financials and shares with low price-to-book ratios. The composite stock index rose 4.90 to 836.49.

SINGAPORE edged lower on losses in some shipyard and

property stocks, although Malaysian shares traded over the counter and Singapore's second and third liners were actively dealt. The Straits Times Industrial index dipped 3.96 to 2,147.54.

TAIWAN advanced 2 per cent to close at its highest level since May on buying of the plastics sector. The weighted index gained 99.44 to 4,708.17 in turnover of T\$68.9bn.

Plastics forged ahead on expectations that the industry will see a turnaround next year. The Formosa Plastics group's announcement last week that it would soon start major construction work on its \$8bn petrochemical complex also triggered strong buying. Formosa Plastics surged T\$2.50 to T\$62 and its affiliate Nan Ya Plastics ended T\$2 up at T\$63.50.

AUSTRALIA rose moderately in thin trading and the All Ordinaries index finished 6.3 firmer at 2,053.7. Turnover amounted to A\$518.6m.

Europe strives to end year with a rally

By William Cochrane

As strategists continued to discuss the threat of higher US interest rates last week, lower domestic interest rates drove the best performers higher in both Europe and Asia.

In Europe, with a gain of 3.1 per cent, there was a sense of bourses striving to produce the traditional year-end rally which would allow their clients to close their books happily on December 31.

To help them, they had more positive statements concerning the Gatt negotiations, the favourable UK Budget and the round of interest rate cuts triggered by the 0.25 percentage point reduction in the German repurchase rate, said Mr Marcus Grubb, the Salomon Brothers strategist.

Austria topped the performance figures with a rise of 4.8 per cent. November was a good month for Vienna money markets, says Mr Frank Jonschat at Kleinwort Benson, the intervention rate coming down from 6.2 to 5.8 per cent over the month and lifting the banking sector after three months of underperformance.

Highly geared utilities such as EVN and Verbund continued to lead the market, says

Mr Jonschat, rising on the effect of lower interest rates on their financing costs and on the benefits both utilities will enjoy from domestic tax reform in Austria, including the abolition of the asset and transfer taxes.

In Asia, Malaysia's climb of 4.3 per cent took its halcyon year, so far, to a gain of more than 84 per cent in local currency terms. Foreign & Colonial Emerging Markets said last week that Kuala Lumpur continues to be driven by overseas investors, particularly from Japan. It adds that the slight month-on-month rise in Malaysia's GNP caused it little concern, and that banks continue to cut interest rates.

F&C, however, has its reservations: "Given the current stock market strength, it is worth observing that the market capitalisation of the Kuala Lumpur stock exchange is now three times Malaysia's GNP, and is one of the reasons why we are cautious about the market at present."

Meanwhile, at Goldman Sachs, the bank's US economic and strategy teams believe that US long-term interest rates are unlikely to rise on a sustained basis, primarily because growth is likely to slow again and inflation

MARKETS IN PERSPECTIVE									
	% change in local currency			% change sterling			% change US\$		
	1 Week	4 Weeks	1 Year	Start of 1993	Start of 1992	Start of 1991	Start of 1990	Start of 1989	Start of 1988
Austria	+4.77	+3.73	+38.66	+35.01	+28.40	+26.41			
Belgium	+2.09	+3.46	+27.93	+28.07	+19.48	+17.62			
Denmark	+0.99	+1.54	+34.43	+35.70	+27.56	+25.60			
Finland	+0.83	+2.86	+91.05	+82.00	+76.54	+73.83			
France	+2.86	+4.56	+25.30	+22.05	+15.81	+14.00			
Germany	+3.32	+4.62	+37.25	+36.69	+30.69	+28.66			
Ireland	+2.74	+1.35	+56.19	+51.05	+33.54	+31.46			
Italy	+2.16	+1.01	+39.17	+30.09	+13.66	+11.90			
Netherlands	+2.23	+0.53	+36.24	+34.54	+26.86	+26.86			
Norway	+2.47	+3.77	+30.79	+32.56	+24.84	+22.90			
Spain	+2.61	+1.20	+43.75	+41.91	+15.58	+14.77			
Sweden	+1.94	+4.38	+37.02	+31.84	+12.42	+10.67			
Switzerland	+2.50	+5.75	+47.99	+38.85	+36.78	+34.63			
UK	+3.82	+4.55	+16.87	+15.04	+15.04	+13.26			
EUROPE	+3.07	+3.49	+28.96	+25.20	+20.44	+18.96			
Australia	+0.30	+1.27	+38.06	+27.55	+28.18	+24.22			
Hong Kong	+0.28	+0.33	+88.95	+71.18	+74.27	+71.56			
Japan	+0.27	+7.44	+12.87	+12.46	+31.61	+29.52			
Malaysia	+4.32	+4.77	+82.81	+84.36	+91.59	+88.62			
New Zealand	+1.40	+4.49	+41.40	+38.20	+51.12	+48.78			
Singapore	+3.85	+4.77	+54.83	+48.92	+52.82	+50.45			
Canada	+0.44	+1.91	+22.24	+20.34	+16.98	+15.13			
USA	+0.39	+1.21	+7.74	+6.29	+7.98	+6.29			
Mexico	+1.86	+12.84	+33.57	+26.87	+29.58	+27.67			
South Africa	+1.58	+7.07	+38.09	+37.82	+52.82	+50.44			
WORLD INDEX	+1.70	+0.55	+16.74	+14.76	+16.78	+17.91			

should remain subdued. The London strategy pairing of Mr Sushil Wadhvani and Mr Mushtaq Shah believe global equities have been over-reacting, and that equity market weakness caused by rising rates will prove temporary.

FT-Actuaries World Indices

NATIONAL AND REGIONAL MARKETS															
Figures in parentheses show number of lines of stock															
FRIDAY DECEMBER 3 1993															
	US Dollar	Day's Change	Point	Yen Index	Doll Index	Local Currency Index	Local Dollar Yield	Gross Domestic Product	US Dollar	Point	Yen Index	Doll Index	Local Currency Index	Local Dollar Yield	Gross Domestic Product
Australia (59)	155.42	+0.9	154.60	106.50	123.03	154.34	+0.1	3.33	153.99	154.00	105.85	137.82	154.24	162.83	117.29
Austria (17)	177.17	+1.2	179.23	121.40	158.48	158.49	+1.3	1.01	175.12	175.13	120.39	156.74	156.53	184.47	131.19
Belgium (42)	156.71	+1.3	155.38	107.37	140.17	139.90	+0.9	4.11	154.69	154.70	106.33	136.44	136.87	156.76	131.19
Canada (107)	133.14	+0.3	132.44	91.23	119.09	128.13	+0.2	2.61	132.75	132.76	91.25	118.80	117.89	135.64	111.41
Denmark (13)	233.78	+0.3	232.52	160.18	209.09	215.95	+0.1	1.18	232.02	232.03	160.18	209.09	215.95	115.41	111.41
Finland (21)	121.00	+0.3	120.35	82.21	108.23	148.71	+0.8	7.71	121.34	121.35	82.42	108.80	147.85	129.99	65.95
France (89)	167.70	+1.4	166.90	114.96	150.07	155.63	+1.1	2.98	165.88	166.41	114.99	148.02	163.95	177.05	142.72
Germany (60)	131.65	+0.6	131.15	91.74	119.74	119.74	+0.1	0.85	131.12	131.13	91.18	118.80	147.85	129.99	65.95
Hong Kong (50)	380.11	+0.7	378.09	260.45	340.02	378.96	+0.7	2.89	377.60	377.62	258.57	327.97	374.32	384.34	216.22
Ireland (14)	178.50	+0.2	177.59	122.31	153.66	173.06	+0.6	3.18	178.91	178.92	122.99	160.12	179.19	179.19	129.28
Italy (70)	51.40	+0.0	51.07	42.07	54.02	78.55	+1.4	2.13	60.07	60.17	41.36	53.93	77.47	79.93	53.76
Japan (489)	136.08	+0.2	135.36	93.74	121.74	93.24	+0.1	0.85	135.80	135.81	93.18	121.56	93.24	93.24	116.16
Malaysia (57)	370.17	+0.5	370.55	337.61	441.12	485.57	+0.4	1.44	369.87	370.80	337.36	439.23	483.95	493.17	251.68
Mexico (19)	212.23	+1.6	209.08	144.08	180.41	712.15	+1.6	0.88	208.68	209.35	142.75	181.07	708.19	210.22	140.03
Netherlands (28)	152.07	+0.3	151.05	131.61	171.81	169.10	+0.3	0.85	151.05	151.06	131.61	171.81	169.10	151.06	131.61
New Zealand (14)	63.81	+1.1	63.47	43.72	57.08	81.68	+0.8	3.80	63.10	63.10	43.38	48.48	61.18	61.18	100.30
Norway (22)	169.29	+0.8	168.35	115.99	151.40	171.43	+0.7	1.49	170.24	170.25	117.01	152.37	168.35	170.25	117.01
Singapore (38)	321.01	+0.5	319.31	219.07	287.14	298.99	+0.7	1.25	319.31	319.24	219.08	289.85	298.99	332.85	207.40
South Africa (80)	322.80	+0.2	321.82	152.65	199.29	216.58	+0.2	0.29	321.82	321.83	152.65	199.29	216.58	220.39	147.72
Spain (42)	123.83	+1.2	123.12	91.70	119.71	143.81	+1.0	1.16	123.12	123.23	91.69	118.80	147.85	129.99	65.95
Sweden (39)	160.23	+0.1	160.26	125.56	153.90	220.33	+0.5	1.53	163.37	163.38	120.06	164.12	229.79	209.82	148.70
Switzerland (89)	152.15	+1.3	151.34	104.26	136.11	140.90	+0.8	1.54	150.22	150.23	102.37	134.48	139.37	152.15	108.91
United Kingdom (216)	155.21	+0.9	154.17	133.75	174.60	194.17	+0.3	1.53	153.65	153.66	133.75	174.60	194.17	155.21	108.91
USA (158)	129.31	+0.4	128.31	125.73	169.35	189.31	+0.4	2.73	189.59	189.60	129.65	169.35	189.31	189.31	129.31
Europe (779)	161.28	+0.9	160.41	110.50	144.26	156.31	+0.5	2.91	159.84	159.85	109.88	143.07	155.82	160.27	135.95
Nordic (114)	179.88	+0.3	177.73	122.43	159.82	191.32	+0.5	1.30	178.78	178.77	122.88	159.89	192.20	194.51	135.95
Pacific Basin (715)	145.98	+0.3	145.20	102.03	130.36	103.82	+0.1	1.18	145.98	145.97	100.07	130.36	103.82	106.80	105.89
Europe Pacific (1464)	152.20	+0.8	151.39	104.28	136.13	124.06	+0.2	1.93	151.31	151.38	104.05	135.47	123.80	128.82	117.28
North America (629)	185.81	+0.4	184.83	127.24	166.23	185.12	+0.4	2.33	185.11	185.16	127.28	166.70	184.43	187.88	171.61
Europe Ex. UK (533)	140.11	+1.0	139.37	96.00	124.06	140.11	+1.0	1.38	139.37	139.38	96.00	124.06	140.11	140.11	139.37
World Ex. Japan (243)	240.99	+0.7	239.70	165.15	215.58	223.02	+0.5	2.65	239.28	239.20	165.21	214.18	222.00	245.12	155.80
World Ex. US (650)	153.69	+0.5	152.88	105.32	137.48	126.91	+0.2	1.94	152.86	152.87	105.09	136.81	126.83	128.89	118.51
World Ex. UK (11952)	181.61	+0.4	180.81	116.78	148.62	145.51	+0.3	2.08	180.95	180.96	116.86	144.08	141.24	168.65	134.22
World Ex. 56 At. (219)	182.41	+0.5	181.60	116.78	148.62	145.51	+0.3	2.08	180.95	180.96	116.86	144.08	141.24	168.65	134.22
World Ex. Japan (1629)	151.24	+0.6	150.28	102.20	162.14	177.84	+0.4	2.76	160.19	160.19	102.87	161.23	177.07	181.67	157.17
The World Index (2166)	104.00	+0.5	150.72	112.75	147.24	148.22	+0.3	2.95	163.80	163.81	112.61	146.62	148.91	170.68	137.38



# ENERGY EFFICIENCY

Tuesday December 7 1993

Most countries plan energy saving measures to reduce greenhouse gas emissions. But although there is scope for much greater fuel efficiency, governments are failing to provide enough money to convert their words into action, says Deborah Hargreaves

## A burning global issue

Energy efficiency evokes the same general acclaim as world peace. But individuals, and even governments, are generally hesitant to back their support with generous supplies of hard cash.

With crude oil prices at their lowest in real terms for 20 years and most domestic fuel bills unchanged in recent years, there is not the urgency to save energy that existed in the 1970s. Gone too is the fear that world fossil fuel resources are rapidly running out.

The agenda for the energy efficiency industry has shifted to environmental objectives. Most governments plan to use some energy saving measures as a way of stabilising greenhouse gas emissions and environmentalists believe that energy conservation must play a large part in combating global warming.

Mr Kenneth Clarke, UK chancellor of the exchequer, underlined the government's plans to use energy efficiency measures as part of its battle against global warming, when he almost doubled the funds available to pensioners for home conservation measures to £35m in last week's Budget.

His announcement followed criticism by a Commons select committee a week earlier which attacked the government's policies on energy efficiency as being incomplete and

inadequately funded. Mr Robert Skinner, director of the long-term co-operation and policy analysis division of the International Energy Agency - the west's energy monitoring body - highlights some of the difficulties involved in adopting effective energy savings policies: "while we all agree there is great potential for increases in energy efficiency, most governments have little idea how to go about achieving them."

He stresses that few governments have any idea of how to set realistic targets for energy conservation and, when they do, few understand how to monitor them.

There is also the fear of "bounce back" where energy savings made in some areas do not necessarily lead to a reduction in overall energy consumption. This was experienced in Denmark where the government has very successfully improved the efficiency of new appliances in recent years so that they use a lot less electricity. But electricity consumption has risen - people have more appliances.

This effect is often cited by detractors as a reason for not bothering with energy efficiency. But if living standards continue to rise, arguably the Danes would have purchased more appliances in any case and, if efficiency standards had



not been increased, they would be using even more electricity. Since the residential sector of most advanced economies accounts for 60 per cent of total electricity consumption, many countries have tried to target domestic consumers in their efficiency drives. But this is, by its very nature, a fragmented and imprecise art. It is hard to convince people that they can do a lot more towards saving the world by lowering the central heating or draught proofing their windows than

by recycling their rubbish. The UK government has tried to stress the environmental benefits of energy saving in a series of television adverts. "It is a very difficult message to get across," says Mr Colin Myerscough, director of the UK Energy Efficiency Office.

Few governments can now afford to offer large grants for energy saving measures. But the new buzzword in the sector is "voluntarism", whereby government forms partnerships with industry and utilities to

promote energy conservation. In the Netherlands, which has set a target for improving energy efficiency by 20 per cent by the end of the decade, the government has signed voluntary contracts with 80 per cent of its industrial companies. These accords set out energy savings targets and realistic measures that can be taken to achieve them.

US utilities have taken this a step further by paying consumers to introduce energy efficiency measures - so-called

demand-side management. This is done to some extent in Europe where companies slash prices of off-peak electricity. In the US, the utilities annually spend \$3bn to \$4bn on these initiatives. This is partly self-interest since the regulatory regime allows companies to charge only low electricity prices while adding new plant is restrictively expensive.

Although such initiatives and better industrial practices have reduced electricity demand slightly in the US, it is still three times that of Japan. The average person in the US consumed 6.3 tonnes of oil equivalent in 1973 by 1991 that had dropped to 5.4 tonnes. In Japan, demand increased slightly from 2.3 to 2.5 tonnes.

The reason for the huge gap is largely the smaller flats and closer proximity of the average Japanese household, added to the fact that many energy-intensive industries have moved out of the country since the last oil crisis.

One way of encouraging more energy conservation in the home is to introduce higher standards of energy efficiency for domestic appliances. Until this year, the US was the only OECD country with mandatory appliance efficiency standards. These were recently expanded to include commercial heating, cooling and water heating. Early this year, Canada passed legislation providing for energy efficiency standards for 20 products including household equipment.

The European Union has been studying whether to take a similar step and plans to introduce a directive on energy standards for fridges and freezers that would become effective in 1995 or 1997. One problem, aired by Mr Andrew Warren, director of the Association for the Conservation of Energy in the UK, is that when

gaining agreement between all member states for such a step standards can become watered down to the lowest common denominator. Some countries are also labelling appliances for their energy efficiency. Other countries have adopted innovative, market-led approaches to the problem. For example, in Sweden, the

National Board for Industrial and Technical Development introduced a competitive procurement programme open to Swedish and foreign companies. It guaranteed companies a market for the most energy-efficient products they could produce - the government would buy them for public housing.

As a result of the Swedish competition, a fridge was developed which was 35 per cent more energy-efficient than the market average. The success of the programme has led the government to look at other procurement projects for advanced window design.

In the US, a group has been launched called the Consortium for Energy Efficiency, with members from public and private sectors. The consortium has launched a "golden carrot" strategy to develop 250,000 fridges that are 25 to 50 per cent more energy-efficient than comparable 1993 models. The winning manufacturer will receive \$30m which has been pooled by US utilities as well as free promotion to the utility customers.

While curbing energy use in the home is likely to continue to be a piecemeal and fragmented operation, governments are being urged by environmental lobbies to introduce concerted transport policies in an effort to reduce emissions. But the transport sector has proved strongly resistant to efforts to conserve fuel.

Most developed countries have flirted with the idea of a carbon tax, but this has proved to be politically unpalatable even if it could be shown to work. International Energy Agency studies report that carbon taxes would have to be set at very high levels to curb car use and, even then, the effects would be short-lived.

Mr Skinner believes that, rather than imposing carbon taxes, developed countries should work towards integrated planning regulations that ensure any new buildings - particularly out-of-town housing estates - while adhering to strict energy efficient building codes, should also be linked to a public transport system that discourages car

### IN THIS SURVEY

US: President Bill Clinton includes 50 energy steps in his Climate Action Plan; power station technology that favours gas over coal; management systems can be too complex for their owners PAGE 2

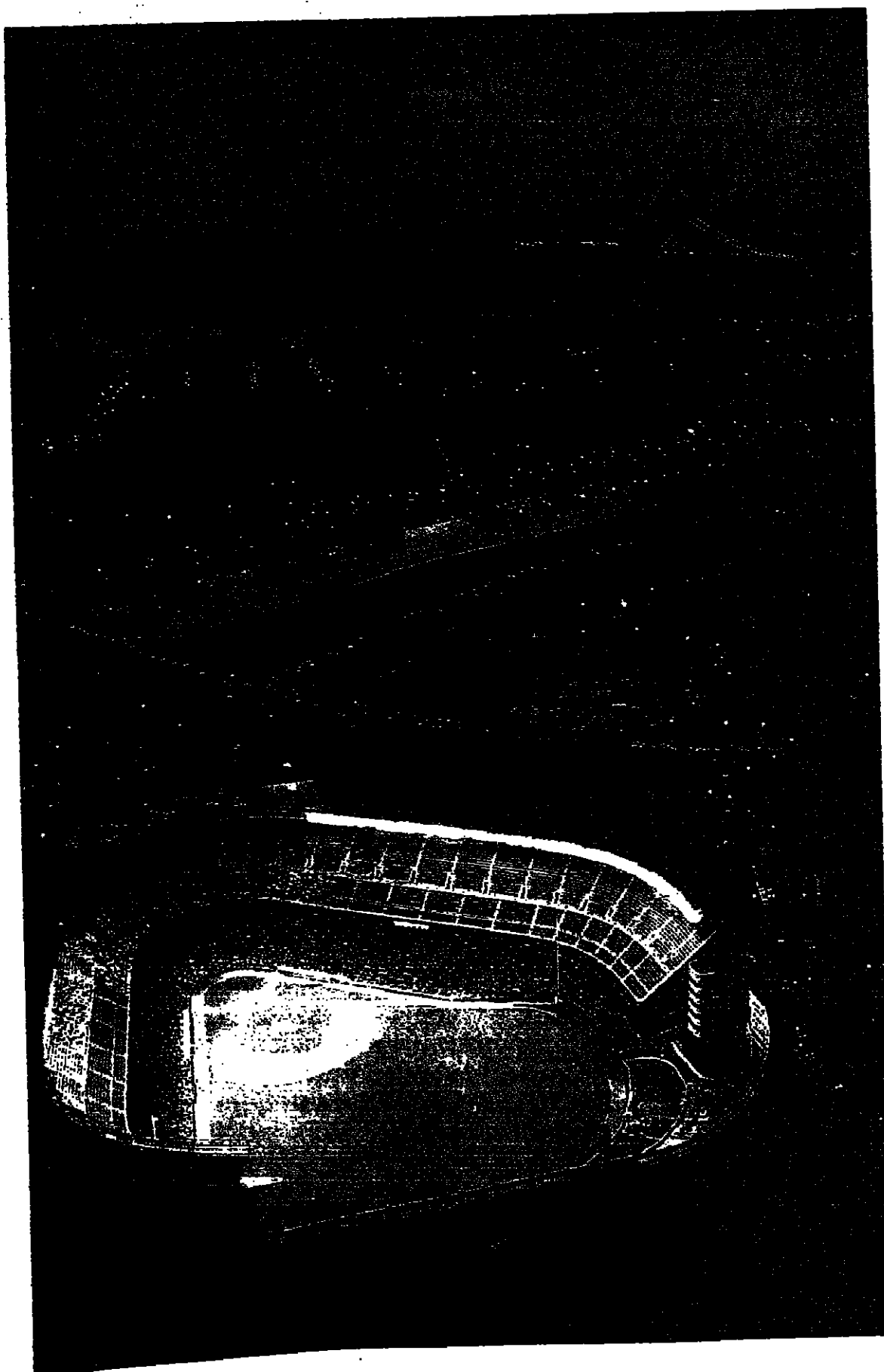
Britain: Parliamentarians take a dim view of the government's energy saving commitment; the strange tale of Farmer Lambkin and his overheated piggery PAGE 3

Europe's energy tax proposals, the flagship of its carbon emissions reduction programme, are on the rocks; Britain's householders are victims of their own sloppiness; cash shortage hits Scotland's efficiency efforts; Sweden in search of non-nuclear alternatives; UK industry's energy costs have fallen 40 per cent PAGE 4

The accelerating race for the lightweight, low-fuel motor car is concentrating on aluminium bodies and lean-burn engines; how combined heat and power has come in from the cold; at the end of the engineers' rainbow a ray of hope for coal PAGE 6

Illustration: Mark Thomas  
Editorial production: Maurice Samuelson

use over the longer term. In short, energy efficiency is a fragmented industry where grand initiatives tend to be inappropriate. Governments are adopting a piecemeal approach as a way of meeting environmental targets. They are urged to do more by vocal environmental lobbies, but low energy prices provide little incentive. And households are unlikely to be spurred on to make great energy savings until they are hit where it hurts: in their wallets.



Can you light up the sky without clouding the air?

Natural gas - affordable, safe and available - is an increasingly popular choice for driving turbines that generate electrical power all over the world. Although it burns relatively cleanly,

combustion does produce nitrogen oxide, implicated in acid rain. Abatement techniques have reduced emissions, but heightened awareness among the industrial nations continues to generate tighter legislative controls and the development of ecologically-sound power plants.

Conventional methods of controlling emissions are costly and dampen efficiency. However, ABB research has now developed a way to burn them off. It is a total solution, reducing pollutants while maintaining efficiency, thus consuming less fossil fuel. ABB has installed its innovative "EV-burner" in the Midland Cogeneration Venture, a joint project to produce power for the Dow Chemical Company and the State of Michigan, USA. At full power load, this plant is now producing emission levels well below the world's most stringent requirements.

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## ENERGY EFFICIENCY 2

Energy squandering is targetted in Clinton's aggressive clean-up plan, writes Karen Zagor

## On earth as in the atmosphere

As the US tries to shake off its image as a prodigal energy user, the issue of energy efficiency has come increasingly to the fore. It was, therefore, no great surprise last month when President Clinton's Climate Action Plan to control global warming included about 50 initiatives to improve energy efficiency.

The plan, which Mr Clinton described as "a very aggressive and very specific first step," includes proposals to regulate more stringent efficiency standards for household appliances such as air conditioners, cookers and television sets; it is estimated that the US uses about 30 per cent more energy per unit of activity in home appliances than other countries. Mr Clinton is also looking at ways of getting private investments to improve energy efficiency at federal dams.

In addition, Mr Clinton hopes to change the tax law to encourage increased use of public transportation. The proposal would make employers who provide employee parking also offer an equivalent cash subsidy to employees who use other means of transportation.

The Clean Air Act Amendment of 1990 already requires companies employing more than 100 workers to reduce the number of cars driven to work or face substantial monthly fines.

Other aspects of the plan include shoring up government programmes that help companies evaluate their use of energy for

lighting and computer systems. Projects such as the Environmental Protection Agency's Green Lights programme, which came to life under the Bush administration, are geared at persuading companies and local governments that they will save significant sums by using less energy. The Green Lights scheme helps companies and local governments evaluate the efficiency of their existing lighting systems and replace them with more energy efficient alternatives.

The EPA was so encouraged by the success of its Green Lights project that it later launched Energy Star, a programme designed to encourage computer companies to make energy efficient personal computers which automatically switch to low energy consumption when not in use. Participation in both schemes is strictly voluntary.

Businesses will also be encouraged to examine their heating, ventilation and air conditioning systems and improve them for energy efficiency within seven years.

But Mr Clinton, like his predecessor George Bush, has backed away from pro-

posing mandatory efficiency standards for business and industry, relying instead on voluntary cooperation to cut both energy use and greenhouse gas emissions not covered by the clean air legislation of 1990.

Mr Clinton has also steered clear of the politically contentious issue of mandating higher car fuel efficiency standards. Instead, in a move which may placate

need to be as comfortable, safe and affordable as current models.

To do this, the administration is giving the car makers access to defence industry technology such as stronger, lighter-weight materials which were developed for weapon systems and electronics initially designed for anti-missile defence.

Meanwhile, existing car technology is

With redesigned tyres, cars and trucks can run more efficiently and thereby pump less pollution into the air

some critics, the administration and the big three US auto makers plan to join forces in a research project to produce a new generation of cars. The aim of the study is to cut auto emissions of carbon dioxide, largely by designing cars which consume fuel more efficiently.

The new cars, due to be designed in the next 10 years, should be three times more efficient than the 28 miles per gallon used by today's average car. In order for the plan to succeed, the new cars will also

being re-examined as the nation moves towards compliance with the new standards legislated by the Clean Air Act Amendment of 1990. And manufacturers are discovering that reduced emissions and improved energy efficiency often go hand-in-hand.

The new standards apply to air pollution sources with a potential to emit 100 tons a year of any regulated pollutant, including nitrogen oxides, sulphur dioxide and volatile carbon compounds. Although carbon

monoxide is excluded from the federal regulations, it is included in many state implementation plans.

In the area of car engines, manufacturers are paying closer attention to pre-combustion chambers on clean and lean-burn engines. These systems not only help reduce emissions significantly, they also improve fuel economy compared with their uncontrolled rich- or lean-burn counterparts.

Car tyres are also being evaluated. Research by Michelin North America has shown that CO<sub>2</sub> emissions can be reduced significantly and energy efficiency improved substantially by redesigning car and truck tyres. The company has proposed introducing low-rolling resistance radials as a means of complying with stricter air quality codes without redesigning vehicles. According to a study by Michelin North America, which was presented this summer to the Department of the Environment, annual emissions from passenger cars could be slashed by 16.1m tons while heavy truck emissions could be cut by 4m tons just by using new tyres.

Although low-rolling resistance passenger tyres cost significantly more than standard tyres, the added expense could be largely offset by fuel savings. Michelin estimates truck drivers would save \$1.108 in fuel costs by using these tyres, even after including the higher cost of the tyres. Bus drivers would save about \$170.80 using the tyres. Personal car drivers, however, would pay more for the tyres than they would recoup in fuel savings.

Other alternatives include the use of compressed natural gas vehicles. Vons, a California-based grocery store chain, has been testing compressed natural gas vehicles to help it comply with the Clean Air Act's stricter air pollution standards for interstate transporters which go into effect next year. Vons found that the long-haul truck trailers could cut emissions by up to 75 per cent.

The Clinton administration may be loath to legislate wide-sweeping measures to improve energy efficiency, but it has indicated that it will not balk at fining companies which fail to comply with existing environmental standards. When US Attorney General Janet Reno recently said that environmental enforcement would be one of her top priorities, she added that stiff penalties are necessary "to make sure our business community knows that companies that 'play by the rules' are not at a competitive disadvantage to those willing to risk violating the law".

Andrew Baxter describes the combined-cycle machines that power the dash to gas

## Getting the most from the least

Over the past 10 to 15 years, combined cycle power generation has made a big contribution to restoring the reputation of large utilities for safe, efficient, and relatively unpolluting production of electricity.

After all the criticism - unjust or otherwise - heaped on utilities for their dirty coal-fired plants or politically sensitive nuclear stations, power generation using the combined cycle gas turbine (CCGT) method might appear to be the answer to every power provider's prayers.

It isn't, of course, but in many respects it comes closest to achieving the balance between the thermal efficiency and environmental friendliness now sought by big utilities.

Combined cycle power plants use the exhaust gases from a gas turbine, which are still at a temperature of at least 500 degC, to generate steam via a waste heat recovery boiler. The steam is then used to drive a steam turbine.

This means that thermal efficiency, the amount of energy per unit of fuel used, is about 55 per cent, much higher than simple cycle gas turbines or the average coal-fired steam turbine plants. These currently achieve efficiencies of 35 and 40 per cent respectively, although efficiencies of 45 per cent are claimed for the latest "squeaky clean" conventional coal-fired plants.

On top of increased thermal efficiency, CCGT power generation emits very little sulphur dioxide, and has low nitrous oxide levels compared with coal-fired stations. Assuming that efficient supplies of gas are available, a CCGT station provides efficient, flexible and clean power generation.

It has taken a long time, and considerable expense by equipment suppliers, to reach these



Enron gas-fired power plant, Teesside: thermal efficiency is much higher than the average coal-fired power stations

efficiency levels. In the early 1980s the efficiency of combined cycle plants in general was about 38 per cent, and by 1975 had exceeded 40 per cent.

Today, the largest gas turbine currently in use is the 212-

**CCGTs come closest to meeting utilities' need for environmental friendliness**

226MW General Electric MS9001F machine, which is being manufactured jointly by GE of the US and GEC Alsthom's European Gas Turbines subsidiary. In combination with a 120MW steam turbine in a Vega 109F unit, efficiencies of about 55 per cent and an output of 335MW can be achieved.

It is not surprising, therefore, that combined cycle is

expected to play such a large part in fulfilling worldwide needs for additional power capacity over the next 10 years.

GE forecasts 610GW (gigawatts, or thousands of megawatts) of capacity additions from 1993-2002, of which 207GW will be provided by steam, 179GW by combined cycle, 101GW by gas turbines alone, 86GW by hydroelectricity and renewables, and 38GW by nuclear.

In the US over the same period, it expects most of the additions to be combined cycle and gas turbines. The breakdown is 64GW of combined cycle, 25GW of gas turbines, 12GW of steam, 3GW of hydro and renewables and 1GW of nuclear, amounting to 105GW of total capacity additions.

The general consensus in the industry is that efficiency improvements are slowing

down, and that it will take perhaps a decade for combined cycle to exceed 60 per cent thermal efficiency.

But suppliers have not yet reached the point of diminishing returns, for a simple reason: even very small percentage increases in thermal efficiency can reduce a utility's annual fuel bill by millions of dollars or equivalent, or allow it to produce more power from the same fuel cost.

Two developments in the power generating equipment industry this year show that none of the handful of major suppliers would be happy if any one rival was to take an unassailable lead in the thermal efficiency race - which is really a poker game where each supplier tries to meet or raise his rival's figure.

In February, GE announced a worldwide licensing agree-

ment with Enxergy, a small California-based company, which will allow GE to graft the so-called Kalina cycle technology on to the combined cycle process and possibly add one or two percentage points to thermal efficiency.

The Kalina cycle, developed by Dr Alexander Kalina, a Russian émigré, avoids some of the compromises inherent in the standard Rankine steam cycle by using a mixture of fluids which have different boiling points - normally, ammonia and water.

Using the mixture increases the thermodynamic availability of energy transfer from the gas turbine exhaust to the steam turbine, and thus produces more electricity from the same quantity of fuel.

Then, in September, Asea Brown Boveri announced the introduction of two big new turbines which it claims will



St Pancras Station and the new British Library: old and new buildings pose different problems

## COMMERCIAL BUILDINGS

## Over-sophistication can be a headache

The shiny new building was quiet and cold. "I'll get some tea to warm you up," said the chief executive. That was cold too. He could not raise the heating. "Sorry. The computer controls all that." The remote brain also kept lights blazing on the deserted floor because scanners detected us sitting in the corner. The electricity bill must have been frightening.

Ten minutes later - probably around the time the lights automatically winked out - in a cosy basement office sipping hot tea before a pulsating fan heater, the building services manager quoted a figure resembling the debt of a small South American nation. He also listed the reasons.

The air-conditioning was too powerful and the lighting controls too inflexible. He had secretly turned down the heating and wanted to do some-

thing more radical but could not convince the board. These two executives - happy to talk if guaranteed anonymity - reveal deep-seated problems now coming under serious attack. Firstly, it is not just old and draughty premises that have swollen the total energy bill for buildings to more than \$20bn a year. Perhaps more disturbing, there is plenty of expertise to cut these costs by as much as half but the message often does not reach decision-makers.

A generation of new office blocks were seriously overspecified in the rush to cater for new technology, particularly in central London. Air-conditioning constitutes as much as a fifth of running costs, so it must run efficiently. Yet designers created systems with as much as five times the capacity required, according to Mr Peter Hill of the Building Research Establishment Conservation Support Unit (BRECSU).

"So often in the past, true heat gain from office equipment has not been calculated," he says in a study presented to CLIMA 2000, the international energy and environment convention held in London this month. A study of computers, printers and copiers found some create as little as a tenth of the energy output rated by manufacturers. And that is when they are switched on. More than 10 per cent of engineers, for instance, never touch a terminal and a third are only intermittent users, so calculating heat per head of staff can be wildly inaccurate.

Lower building specifications are now being developed but with so little development

taking place, progress is hard to assess. Change could be enforced from above within a couple of years as consultation drafts for the next round of building regulations show heavy bias against air-conditioning. This caused a small earthquake in the property industry, however, leading to a second round of talks.

Critics insist that some occupiers demand air-conditioning, particularly among the fumes and pollution of cities like London, and without them, certain buildings would not be viable investments because the rents would be too low.

"The overriding problem is educating developers and occupiers," says Mr David Lush, president of the Chartered Institution of Building Services Engineers. He believes energy-saving will not become a major force until tenants routinely ask how much a building costs to run. At the moment that does not happen, according to Mr Peter Mantle of property consultants Jones Lang Wootton. They bundle this up with overall occupation costs.

A standard for measuring efficiency posted as a label on each building would nudge potential tenants in the right direction, says Mr Lush. The CIBSE is now working out a system for inclusion in the regulations, although this might not be effective until the end of the decade.

Meanwhile, the Building Research Establishment is making the running, claiming to have covered around a quarter of new office buildings since 1990 with its Environmental Assessment Method (BREAM). This goes beyond energy-efficiency, including factors such as pollution and recycled materials and was extended to cover new industrial units this month. It could attack the fundamental problem that construction and the production and transport of materials consumes almost as much energy as a building will use in its lifetime.

Dorford International business park on Tyneside was the first scheme awarded the more stringent Bream certificate earlier this year and is 90 per cent let within six months of completion. Mr Trevor Silver of Akeler Holdings, the developer, says that while high ratings might not clinch deals, with so much space on the market they block them.

Investors also realise that "greenness" will have a significant impact on property values by the end of the decade, so they must prepare the way now. Legal & General, one of the country's top landlords, has been operating along these lines for the last couple of years.

Existing buildings provide the biggest challenge. Anthony Beattie of Jones Lang

Wootton, one of the specialists making Bream inspections, says many companies have put such considerations on the back-burner during the recession but tenants are gradually pressing landlords to identify energy-saving improvements. "Meanwhile, a vast amount of second-hand space is virtually unlettable unless refurbished," says Mr Beattie. "That would be the ideal time to raise energy efficiency. In fact, it will probably be essential."

Some large owner-occupiers are already taking stock. Mr David Hatch, adviser to the BBC, gave a commitment at this year's relaunch of Bream that all the corporation's major buildings would be assessed. London Transport has made a similar pledge.

This will not demand the sort of wizardry often put forward for futuristic new ener-

'Green' features of buildings will significantly affect their value by the end of the decade

gy-saving buildings, however. "The technology has been there all the time," says Mr Ted Nicklin. His firm of architects and engineers, Ryder Nicklin, transformed the Vickers tank plant in Newcastle more than 10 years ago, installing draught-proofing, integrated energy controls and low-energy lighting. It cost \$2m but cut bills to \$70,000 a year, a tenth of their former level.

"The company was ahead of its time," he says. "We could talk the same language. Many boards seem proud to boast ignorance about such matters."

Not for much longer, according to Mr Bill Musanoff of BRECSU. Working on behalf of the government's Energy Efficiency Office, his team has persuaded 1,500 top companies to commit themselves to re-education, so energy matters are incorporated in board decisions. Meanwhile, technicians are being given language lessons.

"Businesses often have experts who know what should be done but they cannot talk to their own managers. Boards talk strategy, not widgets. We are teaching them to communicate." One essential tool is an energy management guide published this year, which acts as a combined dictionary to the vocabulary of company organisation, and a guidebook to management structures.

Perhaps my managing director should sit down with his own expert for some joint reading. Then perhaps he will at least be able to get a hot cup of tea.

David Lawson

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## ENERGY EFFICIENCY 3

Politicians describe British energy policy as too narrow and inadequately funded

## Backbenchers turn up the heat

The UK was one of the most complacent nations in the world when it comes to energy efficiency - "and that runs from the top to the bottom," said Mr Robert Jones, a Conservative MP and the chairman of the influential House of Commons environment select committee. Mr Jones was launching a highly critical report on the government's approach to energy efficiency.

The committee report blasted government conservation initiatives as being "neither a sufficiently comprehensive nor an adequately funded programme of action". It is unlikely to be swayed by Mr Kenneth Clarke's move in the Budget to increase funds available to pensioners for energy saving measures.

The UK government has set a target

The committee called on the government to establish a programme of targets

get for arresting the growth in its carbon emissions and even reducing them from 170m tonnes in 1991 to 160m tonnes by the end of the decade. Around half of this target is due to be met by energy efficiency.

But the select committee was very sceptical that these targets could be achieved. In addition, the committee called on the government to establish a rolling programme of emission reduction targets beyond 2000 since carbon outflows are expected to increase significantly at the end of the decade.

Government should also lead by example, the committee stressed. It criticised the government for having few clear targets on cutting energy use by its own departments - Whitehall's energy consumption actually rose last year.

One of the key problems highlighted by the committee's report is the lack of funding available for some government plans such as the Energy Saving Trust which has been set a target of cutting out 2.5m tonnes of carbon emitted by 2000. The trust told the committee it would need £1.5m to meet its objectives, but this year it is expected to spend £5m-£6m.

In the year since it was set up, the trust has initiated four programmes for saving energy including offering grants to households for the installation of gas condensing boilers and setting up energy advice centres, but these have so far been fairly minor measures.

Funding has come so far from British Gas and the electricity companies which are allowed to pass it through to consumers on their bills. Mr Colin Myerscough, director of the government's energy efficiency office, says a big contribution should come from further changes in the electricity pricing formula.



The Energy Saving Trust offers grants to households for the installation of gas condensing boilers

He is predicting a spend of £200m to £400m for the trust by the end of the decade. But this depends on whether gas and electricity regulators go along with the idea - the MPs pointed out that valuable time was being spent by trust officials negotiating funding with the gas and electricity regulators.

Mr Tim Yeo, environment minis-

ter, acknowledged that the trust's targets were "extremely challenging", and that it would only be able to achieve them with support from regulators and utilities.

Another critique of financing plans for the trust rests on the part played by consumers. Households are likely to be put off investing in making their homes energy efficient

in order to save money on fuel bills when they have to pay a general levy for energy efficiency.

Mr Myerscough admits there will be a period in the mid-1990s when consumers are paying around 1 to 2 per cent more for their fuel because of energy efficiency provisions. "That's pretty rough, but after that, benefits will start to kick in," he

claims. If the trust achieves savings of 2.5m tonnes of carbon as planned, that represents £1m off household energy bills.

However, there is little public enthusiasm over the Government's decision to levy Value Added Tax on energy bills. Although the energy efficiency office believes the imposition of VAT will encourage conservation, Mr Myerscough says the public concern over it "highlights the difficulties of using the price mechanism to control energy demand".

The select committee has called on the government to come up with a comprehensive programme to improve energy efficiency for low income households to counteract the effects of higher bills.

While the trust has focused its attention solely on energy use by households and small businesses, MPs on the select committee want to see its influence spread to the industrial and transport sectors, where great savings could be made.

The energy efficiency office has so far spearheaded the government's approach to industrial savings with various initiatives to encourage business leaders to express a commitment to conservation.

One initiative, which the office has dubbed "Getting energy efficiency out of the boiler room into the board room," encourages senior company officials to nail their colours to the mast of conservation. "This gets top managers thinking about energy efficiency and giving their personal commitment to it," says Mr Myerscough.

He has already signed up more than 1,600 organisations including some notable corporate heavyweights such as Sainsbury, British Sugar, Marks and Spencer, Wellcome and IBM to the programme.

The government also expects to spend £1.7m this year on offering energy management advice to small businesses.

So far, the office has had applications from more than 1,000 com-

panies. **Although the government has some ambitious plans, funding appears to fall short**

One of the most important planks of the government's energy efficiency policy is a planned increase in the amount of electricity to be produced by Combined Heat and Power schemes from a current 4,000 MegaWatts to 6,000 MW.

In short, although the government has some ambitious plans for combating global warming with energy efficiency measures, funding appears to fall far short of what is required.

Deborah Hargreaves

## Case study: temperature control in Mr Lambkin's piggery

## A question of breeding

Mr John Lambkin, who manages a farm for *Farmer's Weekly* magazine, was shocked to see how much energy he was losing from his pig breeding section where 3,000 animals are kept, writes DEBORAH HARGREAVES.

After an energy audit from experts at Adas, the government's farm advisory service, he was surprised to see the savings that could be made by introducing some straightforward improvements.

"Basically, they gave us a kick and said: you look at this every day and look at what you're missing. We hadn't appreciated how much energy was disappearing and how much that costs - when they did that sum, it made us wince," Mr Lambkin said.

Agriculture accounts for 5 per cent of the nation's annual energy consumption, but Adas believes that with a mix of education and advice, farmers can make significant savings as well as improving their envi-

ronmental credentials.

Two years ago, at the behest of the Department of Agriculture, the organisation launched a programme to educate farmers about energy conservation.

This involved running a promotional and advertising campaign in the press as well as providing free farm visits where experts can offer advice on managing energy consumption.

Mr Gareth Ellis, who runs the programme, said a team of advisers made 200 visits last year and are scheduled to see another 400 farms this year.

Fuel bills can account for 20-30 per cent of total input costs on intensive livestock farms, horticultural holdings and for dairy producers and

therefore these farmers are more interested in energy saving. But even a general farmer can end up paying 5-10 per cent of his total costs on power.

"We're offering a common sense approach to the farmer to point out some of the areas he needs to pay more attention to," said Mr Ellis. "It's not exciting, but it often helps to have another pair of eyes look at your energy use."

Adas advisers are looking for obvious failings such as lack of insulation, poor controls on heating units as well as efficiency of record keeping to see if the farmer really knows where his fuel is being used. They rank the farmers on the basis of their energy management: whether they are poor, good or above average.

"We kicked ourselves for not noticing some of these things before," said Mr Lambkin who spends about £2,000 a month on electricity for heating his pig units.

In other forms of intensive livestock production where chickens are kept indoors, farmers can be paying as much as £20,000 a year in heating costs for a unit containing 100,000 birds. Similarly a sow pig unit with 200 animals in it could cost £7,000 a year in fuel.

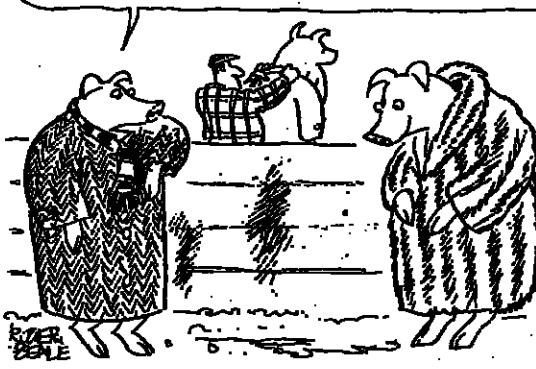
Adas reckons farmers can save 10 to 20 per cent of their costs in these areas by cutting artificial lighting and using energy efficient lighting where possible, ensuring insulation is good and that heating units are regularly serviced and checked. An incorrect tempera-

ture setting of 1 degree C can increase energy use by 15 per cent.

Mr Lambkin could save around £3,000 a year by modifying areas where young piglets are kept, Adas reported. The farmer is busy implementing all the recommendations made for insulating so-called "forward creep" areas where young pigs may move to be comfortable away from their mothers. These are heated by infra-red lamps and Adas suggested cutting the wattage on these bulbs.

However, other recommendations such as reducing the ventilation in the pig units have not been taken up as Mr Lambkin fears the risk of creating an unhealthy environment for the pigs.

VERY SMART, I'M SURE, BUT HAVE YOU NOTICED THEY'VE TURNED THE HEATING DOWN AGAIN?



Another saving stressed by Adas is the use of off-peak electricity, for example, for feed processing or heating water in a dairy parlour.

Crop drying and storage on arable farms is extremely energy intensive, but Adas advisers believe savings of up to 50 per cent are possible if

energy efficient techniques and good management are used.

Crops dry much more quickly in early autumn than later in the winter and farmers can make big savings by drying early. "You can save a lot by good harvest management and getting your crops in early before dews are heavy and the

moisture content is higher," said Mr Roy Gabain who runs a 3,300-acre arable farm near Newmarket.

He has also cut down on tractor use after recommendations from Adas showed he could save almost a third of his fuel costs. He does this mainly by using a lighter cultivator on fields for one to two years in a three-year rotation rather than a heavier plough which uses more fuel.

Mr Gabain also stresses the importance of maintenance of farm machines and making sure that staff are adequately trained to use the vehicles properly. In addition, certain makes of tractor are more fuel-efficient than others.

British farmers face an uncertain financial future as the effects of Common Agricultural Policy reform are felt and if subsidies are cut further as a result of a Gatt deal. This will make them even more cost-conscious and more anxious to trim fuel bills by adopting energy-efficient measures.

Think how long an energy decision affects a building. Scary, huh?

If you don't want to be saddled with a building that no one wants because it's not energy efficient, then read on - because energy efficiency is fast becoming a major issue for owners and tenants.

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## ENERGY EFFICIENCY 4

Europe's energy tax, flagship of its green policies, is on the rocks, says David Gardner

## A long way from Rio de Janeiro

The European Union's proposed carbon and energy tax, rightly or wrongly seen as the flagship of Europe's environmental policy, has run aground, and is not about to be refloated.

The tax was originally due to have started this year at \$3 per barrel of oil equivalent, rising to \$10 a barrel by the year 2000. It is intended to help the EU meet its pledge to stabilise carbon dioxide emissions at 1990 levels by the end of the century, under the Twelve's commitment to the Rio de Janeiro Climate Change Convention. In 1990, the EU emitted 2,738m tonnes of CO<sub>2</sub>. Brussels projects that if nothing is done, emissions will rise some 13.3 per cent by the end of the century.

The tax was designed to complement other measures to cut greenhouse gases, principally the SAVE (Specific Actions for Vigorous Energy Efficiency) programme and the energy conservation programmes of the individual member states.

But an EU-wide energy tax is a radical departure, and the plan quickly monopolised the energies and attention given not only to the EU's fight against global warming, but a good deal of the rest of European environmental policy too.

The EU was in the vanguard internationally when it made its emissions stabilisation pledge three years ago. But it has now fallen well behind, with the tax portion of the emissions strategy mired in controversy for the past 18 months.

There remains a danger that the EU will not be able to ratify the Rio Convention by the end of this year. And even if the Twelve do ratify, there are doubts that they can deliver the projected CO<sub>2</sub> cuts.

The SAVE programme, designed to deliver one third of the cuts through a new range of standards to improve energy efficiency in buildings, vehicles and appliances, has been emasculated. Mr Andrew Warren, director of the European Association for the Conservation of Energy, says "it looks doubtful if even one quarter of that target will ever be met".

The national reduction targets, circulated by the European Commission this spring, look almost as dubious. Totted up, they indicate that total EU emissions would not stabilise but rise by over 4 per cent, or some 110m tonnes. But that is if these individual targets are met, and there is not enough evidence to suggest that programmes have been put in place to ensure they are.

Consequently, attention has increasingly focused on the energy tax, on which the Twelve are divided.

A German-led coalition of six member states (which includes Denmark, the Netherlands, Italy, Luxembourg and Belgium), insists the emissions target cannot be reached without an EU-wide tax.

The four poorest member states (Spain, Portugal, Ireland and Greece) back the principle but in practice want undertakings that introducing the tax will not hold

view that it would be unfairly hamstrung by the application of the tax to what it regards as a clean fuel which does not contribute to global warming. As currently designed, the tax falls on all non-renewable sources of energy.

Lastly and most importantly, the UK, which in the year after the tax was formally proposed in May 1982 had been

this was not the end of the battle. "This is an issue which is not going to go away."

The Danish presidency of the EU, in the first half of this year, and the current Belgian presidency, have strained hard to advance the proposal. But since the EU has no taxation powers, unanimity is required, and Britain's objection amounts to a veto. The UK maintains that its decision at the budget to impose value added tax on domestic gas and electricity obviates the need for an EU tax. In fact, this step merely brings the UK into line with VAT on fuel among its partners. The furor in the UK over VAT on fuel was certainly a disincentive to any further tax on energy, but as Mr Yeo's words suggest, Britain objects to the very principle of the EU being able to levy a tax, even if it is supposed to be fiscally neutral and applied in what is clearly an area for pan-European co-operation.

The debate between Britain and its partners has frequently been acrimonious. In June, Mr John Gummer, UK environment secretary, claimed he had defeated an ambush intended to force Britain into

accepting that a tax was a precondition for ratifying Rio.

Although in April, energy and environment ministers from the 11 agreed on the principle of a tax, this overstatement of the degree of real consensus. In October, Mr Ioannis Paleokrassas, the EU environment commissioner, produced detailed plans on "burden-sharing", which would allow the poorest four member states to phase in the tax. But he himself acknowledges that this served to smoke out the extent of France's concerns, while not yet convincing the four.

In the most recent twist, the Belgian presidency is pushing as a possible alternative the harmonisation upwards of excise duties on fuel. The Commission is looking at the idea, but is not prepared - at least yet - to withdraw the tax proposal to make way for it.

Expectations now are that the Twelve will individually ratify Rio, and that the fight for measures to comply with it will go on. Although the pro-tax faction maintains that overall there will be no net new costs to industry from the measure, most still feel they could lose competitive edge to their partners if they introduce carbon/energy taxes unilaterally.

Greece takes over the EU presidency in January, bringing little expectation that a way out of the emissions impasse can be attempted until Germany succeeds in the second half of next year.

Householders' heat costs are in their own hands, says David Lawson

## The scourge of sloppiness

A brief moment of importance comes out of the blue when the phone rings or a clipboard-clutching figure darts out of a shop doorway. Could you contribute your views on a vital issue? Of course, of course (looking earnest).

Are energy costs important in choosing a home? Certainly. Would you pay more for an efficient home? Ermm... How efficient is your existing home? Have you improved the insulation? Well... Panic sets in. You begin making up "right" answers before rushing off with some lame excuse about a pressing appointment.

Energy-saving is the most politically correct of issues but principles are often lost in a morass of muddled thinking and expediency. Ordinary homes could make an enormous contribution as they produce more CO<sub>2</sub> than cars or factories and make up 30 per cent of the UK's fuel consumption.

But the figures keep rising.

Homes soak up 17 per cent more energy than in 1973, when the oil-price shock brought in fuel-saving. Even the recession has failed to stop this trend; consumption went up 3.75 per cent between 1988 and 1992, according to the Digest of UK Energy Statistics. This is partly due to the

Homes account for over 30 per cent of the UK's fuel consumption

growth in central heating and household appliances but apathy is also a big factor. Most home buyers still put prices before running costs, and existing owners turn up the heat rather than insulate the attic.

One argument for imposing VAT on domestic fuel heat is that it would force homeowners to think about energy bills for an average

three-bed semi will rise by £175 by 1995. Housebuilders make great play that new homes will become even more environmentally attractive. They average seven out of 10 on the National Energy Foundation efficiency scale compared with a miserable national average of four. Lying even managed a perfect 10 through extra measures such as low-energy light bulbs.

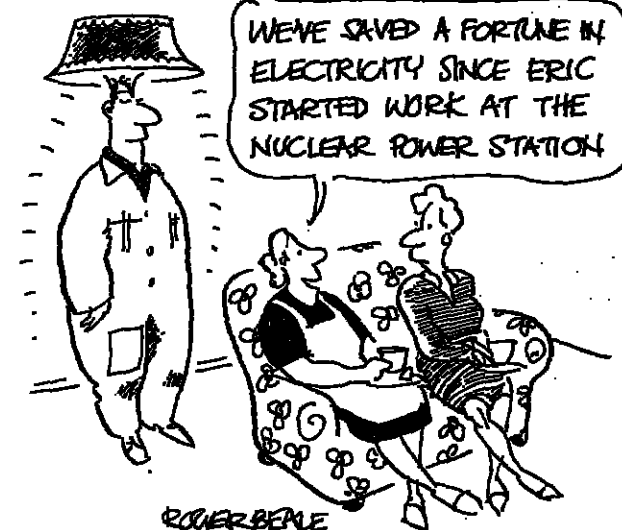
The industry as a whole is not entirely convinced, however. Wimpey Homes is a third of the way through building the company's first low-energy estate. The 32 homes on the outskirts of Newcastle, are based on an idea developed with the Building Research Energy Conservation Support Unit (Brescu) in the 1980s and boast scores of more than nine on the NEF scale.

But building to this higher standard costs an extra £1 a sq ft, according to Euan Creswell, Wimpey's regional direc-

tor, averaging around £1,500 per home. Buyers will not pay this premium over traditional homes. "These measures will cut heating bills by 40 per cent but people still appear to look at capital outlay rather than future revenue savings," he says.

Others are more optimistic. Admiral Homes says it has been overwhelmed by demand for a simple energy-saving package which involves saving £2,500 by doing without a chimney and spending the money on extra insulation. That required a leap of faith. "We always thought an open fire was essential to sell a family home," says David Holliday, the chief executive. Now he knows otherwise.

Brescu is also convinced that extra costs should be marginal. It points that housing associations, which lead the field in energy efficiency, figure on as little as a couple of hundred pounds extra per home. But many builders argue that this



does not allow for extra overheads involved in one-off designs and special materials. Some sites also demand compromises in the siting and internal layout required for high energy scores. South-facing homes, for instance, consume vastly less energy but you cannot follow this rule when trying to cram in enough homes to make a highly priced site viable.

Better energy efficiency will be led by improvements in building regulations rather than market demand, insists Mr Creswell. Latest revisions have raised insulation standards by 20 per cent since 1990 and are due to step up again by a similar amount by 1995. Every new home will also require an energy rating, which should help raise awareness among buyers. The Newcastle scheme is a test-run for building to these specifications.

But all this is a drop in the ocean of older property which consumes the vast bulk of domestic fuel, as new homes make up a mere 1 per cent of the country's stock. Owners

have an easy solution to higher VAT bills at their fingertips, says Megan Flack of the NEF. Draught-proofing and better insulation would more than outweigh tax increases by cutting the running costs of an average home to £600. Taking into account the extra VAT

burden, that produces a total saving of £400 a year.

A typical Nottingham semi on the Foundation's files required work worth £2,300 to reduce annual energy costs from £1,245 to £756, so it would take five years merely to break even. But 1,500 of this went on a high-efficiency condensing boiler. There is plenty of scope for cheaper jobs which have a significant impact on bills, insulating the cavity walls for around £400, for instance, would pay for itself in two years. But owners, just like new home buyers, have to be persuaded that it is worth spending money today for savings and comfort tomorrow. Ms Flack believes the ratings on new homes will put everything on to a level playing field. Selling an old home will be difficult without an energy score because buyers will want to know where they stand. Therefore owners will have to fork out for insulation and an NEF inspection.

One hole gaps through that argument. Only a minority of buyers currently bother with a structural inspection; if they are happy to risk the roof fall-

ing in, it seems logical they will put up with draughts. In fact, running costs hardly come into the equation. In spite of dutiful answers to pollsters, overall price and location remain the major influence on buyers and some of the most sought-after homes like country cottages would be lucky to get on to the NEF score sheet.

For all its popularity, a tax on fuel appears a potent way of making inroads into the £14m bill run up by UK housing. The chancellor is feeding back some of the tax income into higher benefits for pensioners and disabled people, who often live in the least efficient housing. An extra £100m will also go into grants under the home energy efficiency scheme over the next three years. But campaigners would prefer more widespread incentives towards insulation and super-efficient condensing boilers.

In the harsh world of political reality, however, cutting the public spending deficit will take priority over raising housing standards to a level enjoyed in other parts of Europe for more than 50 years.

## Scotland report shows need for cash

Just under a quarter of Scotland's houses fall at the low end of the national scale in efficient energy use. That is around 400,000 homes falling well below the national average, writes DEBORAH HARGRAVES.

"Something must be done to encourage these households to save energy - if you just wait for a turnover in the housing stock, you'd wait 100 years," said Mr Jack Miller, director of AHS Emstar, the Contract Energy Management group,

which has completed a study on the Scottish energy scene.

The study, which was partly sponsored by the European Union, highlights the need for the government to kick start energy efficiency projects if it wants them to take off.

"A lot of companies take a very short term approach to energy efficiency: if a project takes four to five years to pay for itself, many company accountants are reluctant to go for it," said Mr Miller.

The energy study stressed Scotland's wealth in natural

resources which could produce far more of its electricity from renewable energy, but the country has lagged behind the rest of Europe.

The study lays out a series of action plans which could form the basis of an energy policy for Scotland in coming years. In the household sector, it recommends establishing a rating programme for homes that awards marks on the basis of energy efficiency. This system should take into account the Scottish climate.

In addition, the study called

for a revision of Scottish building regulations.

It highlighted a number of key energy efficiency projects such as saving energy in public libraries. At the same time, the study also called for a design for a wind farm. But at the heart of many of its recommendations is the need for additional cash.

"Conservation still happens because of investment and if that investment is not happening on its own, the government should try and make it happen," said Mr Miller.

saving more than \$80,000 a year.

Even the smallest reductions in consumption can help some users because they are so energy-intensive. Ford's Dagenham plant needs 56 megawatts of electricity - pretty much the requirements of a fair-sized town. Vauxhall introduced a computerised energy management system which cut its requirements at Luton by 6.5 per cent in three years to 28MW. The importance of such customers keeps a supplier such as Eastern Electricity constantly on its toes, helping to cut and trim.

Vehicles need half-a-dozen or more coats of rust-proof and paint, and each layer can cost up to £30 per car to dry, so even small savings are significant on a line producing the Mustang each year. Meanwhile, new EU emission rules are forcing changes away from solvent-based paints to water-based glosses. So Eastern Electricity took a proactive line, doing its own research into technical and economic problems.

Not all these large customers are mainstream industrialists. British Gas claims to have saved the RAF £900,000 a year through development of a long-term energy management campaign on various bases while introduction of combined heat and power units at Heathrow's cargo area and the 53-acre University Hospital of Wales cut annual energy bills by £1.5m and £350,000 respectively.

Little things can also mean a lot - such as making sure your quiches are cooked properly. Farmer Giles Foods in Aylesbury was distraught that its snacks were being rejected. Fitting ovens racks tipped the filings and left unappetising burned goo along the sides. A modern electric conveyor oven stabilised the substandard quiches, added 50 per cent to sales and doubled output.

Food processors are like movie directors and midwives: they need hot water, and plenty of it, because people and plant need regular scouring. Farmer Giles found a chilling solution to further energy saving with the help of a little lateral thinking from Eastern Electricity. Refrigeration plant normally ejects the heat into the atmosphere. Now the hot gases pass through an exchanger inside water tanks, providing around 12,000 gallons for hand-washing and plant cleaning. Initial savings were expected to be £15,000 a year - a payback of less than 12 months.

Christopher Brown-Humes on Sweden's dilemmas

## Conservation must replace reactors

Long cold winters, energy-intensive industries such as forestry, and a general emphasis on the environment provide Sweden with plenty of incentives to save energy.

However, the more immediate stimulus to the country's energy-saving drive has come from a 1980 parliamentary decision to phase out nuclear power completely by the year 2010. It is ambitious because Sweden's 12 reactors supply nearly half of its electricity needs. If it is to be met, conservation and enhanced efficiency will have a significant role to play, as will alternative, environmentally-friendly sources of power.

The country's record on energy efficiency is relatively encouraging. Since 1970 total consumption has fallen from 375 terawatt hours (twh) to 368 twh last year, thanks to lower usage by industry and households. Dependency on imported oil has been sharply reduced.

However, electricity consumption has risen steadily over the period, as the country has become more dependent on hydroelectric and nuclear power to compensate for the reduced oil burn. Electricity use has risen by an average of 3.6 per cent a year since 1970 to reach 138 twh last year.

In the last few years there has been a slowing in the rate at which electricity demand has grown, thanks partly to the three-year long recession, but estimates still suggest it will rise by around 1.5 per cent a year between now and the year 2000.

This trend is worrying, given the ambition to phase out nuclear power. Hence a target to cut electricity consumption by at least 10 twh by the year 2000 featured as one of the major components in the government's 1991 energy bill. The bill also placed significant emphasis on promoting alternative fuel sources such as biomass (for combined heat and power plants), wind and solar power.

The bill included a SKr3.7bn allocation for the promotion of energy efficiency through a programme which was initially designed to run for five years but which has now been extended to mid-1995. One of the biggest slices of the cake - SKr1bn - is intended to support conservation, particularly through the procurement of more energy-

efficient technology. Much of the work in this area has been carried out by Nutek, a government body within the Department of Industry and Commerce. Its task has been to bring producers and consumers together to find ways of producing equipment and materials which use less electricity and prevent heat loss.

This covers everything from fridges and freezers to windows and high-frequency lights. The programme claims considerable success in the sense that some fridge/freezer models have been developed which are 40 per cent more efficient, while windows have been produced which are 50 per cent more effective in preventing heat loss. The problem has

been that the recession and a massive slump in building activity have delayed the rate at which the new technology might otherwise have been installed.

The programmes have had a relatively modest impact so far, and results in most cases have yet to be quantified.

But even assuming the conservation drive is successful, the question of how the country is going to compensate for the loss of nuclear power, which last year supplied 45 per cent of its electricity needs, remains largely unanswered. This is the most important question in the whole debate; will nuclear power be phased out as planned?

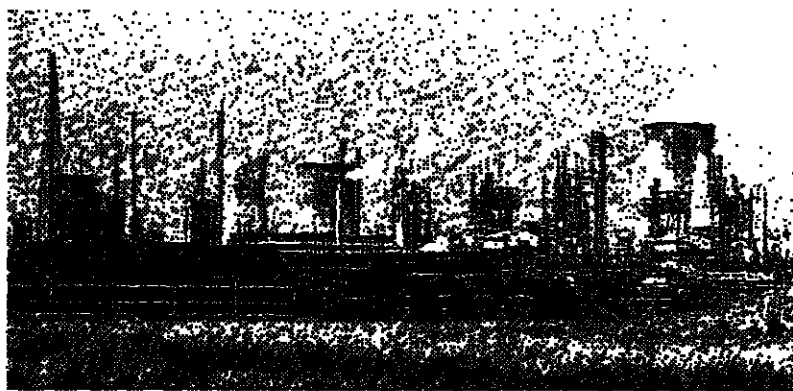
Many observers expect the 2010 deadline to slip. They believe that with memories of Chernobyl fading, and the good safety record of Sweden's own reactors, there is less pressure for a complete phase-out. Mr Carl Bildt, the prime minister, has called the deadline "artificial". The 1991 government bill itself is vague on the subject saying only that "the juncture at which the phase-out can begin and the rate at which it can proceed will hinge on the results of electricity conservation measures, the supply of electricity from environmentally friendly power production and the possibilities of maintaining internationally-competitive prices."

One of the difficulties is that parliament has effectively limited Sweden's ability to expand hydro-electric power generation, the country's most important source of electricity, by saying it will not harness the four remaining unlicensed rivers in the north. Electricity from combined heat and power plants might be able to take up part of the strain, although only 3.4 twh of electricity from this source was generated in 1991. The government has set aside SKr10m of the SKr3.7bn allocation for energy efficiency support specifically to promote CHP production based on biomass, such as wood chips. This includes grants both for new CHP facilities and the conversion of old ones.

The answer to the electricity crunch could also see greater co-operation with Nordic neighbours in the more deregulated energy market now beginning to emerge in the region. But it is too early to quantify the extent of such collaboration.

Whatever happens, there are those who fear that the best Sweden's energy efficiency programmes can hope to achieve is a delay in the need to build new power plants. Current forecasts suggest there will, in any case, be no need for new power capacity until around the year 2000. Critics say that Sweden's energy conservation drive is being undermined by low prices and a tax structure designed to keep export-dependent industry internationally competitive. There should be no surprise about pricing, given that supply has exceeded demand during the current recession. Taxes, though, do seem to have been kept relatively low to favour industry. For example, an energy tax on fuel and electricity consumption was scrapped for industry as from the start of this year. Households are still required to pay this tax, and the rate at which they pay tax on carbon dioxide emissions is four times higher than that paid by industry.

Some worry that low energy costs are conserving Sweden's old industrial culture based around forestry, mining and steel when the country should be doing more to promote the development of high-technology businesses.



ICI Billingham: UK industry has cut its energy use by 40 per cent since 1973

David Lawson on industry's revolution

## Light-footed heavyweights

Industry was once the most obvious of Britain's energy wasters. Born to plentiful coal, raised on subsidised electricity and fattened by natural gas, it should have been almost impossible to tame. Yet it is the only sector to cut demand - down a hefty 40 per cent since the 1973 oil shock and 7 per cent since the recession started.

The figures were bound to shift as the economy veered away from heavy production towards service, but much of the saving can be put down to greater dedication towards cutting bills. This is understandable among users where energy is an obvious - and expensive - part of the production process.

Glucose is a ubiquitous component for food, drinks and drugs which requires a lot of heat to generate steam for extraction from grain. Tunnel Refractories in south-east London saved £1.5m a year through a series of investments in electric mechanical vapour recompression systems which recycle energy through heat pumps. Not content with this, the company called in AHS Emstar, one of the country's biggest contract energy management groups, to examine further options.

This led to a £10m contract to design, finance, install and operate a new combined heat and power plant based on gas-turbine generators. The investment will reduce energy bills by around 10 per cent or more than £500,000 a year - a sweet solution to a sticky problem.

Careful planning and monitoring can reduce bills up to 30 per cent, says Emstar. This can involve anything from replacement of inefficient systems to juggling with the mix of fuels.

Hoover went all the way on its Merthyr Tydfil factory in South Wales. The appliance manufacturer spent £1.5m on new equipment, switched from coal and oil to gas and installed a computerised energy management system remotely monitored down a phone line. This not only cut energy bills by £750,000 a year but reduced CO<sub>2</sub> emissions by more than 70 per cent, says Emstar.

Cutting fuel bills has become more feasible since privatisation, with gas and electricity companies willing to tear up tariff sheets in the battle for business. Independent consultants flourish as power brokers but each supplier also has an army of engineer-salesmen touting advice. Regional electricity groups are even ranging into each other's territory to win orders.

Suggestions sometimes involve cut-

ting consumption of the very product they are selling. The logic is that less leads to more: reducing energy cost per unit will improve efficiency, which may raise overall production and end up with the customer asking for more. It is better to have a satisfied customer taking less power than one buying elsewhere.

Other factors such as the environment also get drawn into the equation. Glass recycling is a popular subject as it takes this most enduring of materials out of an overloaded waste disposal system and cuts down road deliveries. United Glass at Harlow ships in sand from Surrey and Kent, limestone from Derbyshire, plus essential soda ash and mineral additives for new bottles and jars. Every tonne of old glass (cullet) saves the energy equivalent of 30 gallons of oil, says British Glass, the pressure group which co-ordinates the industry's recycling campaign. Total savings amounted to more than 7m gallons at the last count in 1988 and will now be much higher, as recycling is growing in leaps and bounds.

The government is aiming for 10,000 bottle banks and a 50:50 split between new and old glass by the mid-1990s.

United cut energy consumption of its recycling furnace by 17.5 per cent and raise output by a fifth by replacing oil burners with electricity power elements. The £230,000 investment could be recouped in just over a year. A lot of the work at the electricity industry's Capenhurst Research Centre is centred around similar energy-saving schemes designed to supplement efforts by users themselves.

Meanwhile, British Gas is also fighting the same corner. It has helped Tioxide Europe, for instance, to switch part of a titanium dioxide pigment processing plant at Grimsby from liquefied petroleum gas (LPG) to natural gas. This will cut fuel bills by £1m a year and has environmental spin-offs, such as improved working conditions and the elimination of 18 tanker deliveries a week.

Inco Alloys spent two years working with the British Gas Technical Consultancy Service on upgrading to extrusion press facilities at its Hereford plant. This involved building a special test furnace, which eventually proved itself against an initial idea to use electrical induction heating of metals. Energy costs have been cut by 50 per cent,



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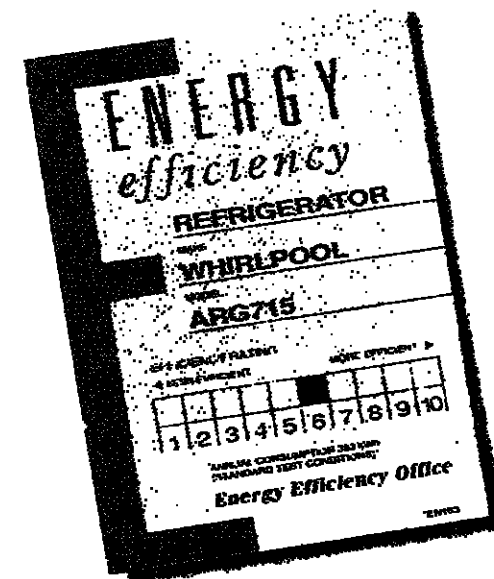
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## ENERGY EFFICIENCY 6

John Griffiths on trends in the motor industry

# Lighter vehicles will be cheaper, cleaner

The motor industry has been making great strides in improving the efficiency and performance of the petrol and diesel engines which power most of the world's cars. A current petrol engine, with multi-valves, fuel injection and electronic management consumes about one-third less fuel than a simpler, similarly-sized and carburettor-fed unit of the 1970s.

But this improvement is barely reflected in the actual number of road miles that a typical modern car can cover per gallon of fuel compared with its 1970s equivalent.

Weight penalties imposed by safety and environmental legislation are offsetting much of the efficiency gain, yet more is being negated by consumer preference for comfort and convenience features, from multi-speaker audio systems to air conditioning.

Such weight increases are far from marginal. On the safety front, for example, side impact protection bars, airbags and seat belt pre-tensioning systems in the last two to three years have begun adding considerably to the weight of the body structure.

Conforming with ever-stricter exhaust emissions standards has meant introducing catalytic converters into the exhaust system, with a variety of plumbing to allow the system to operate correctly such as exhaust gas recirculation, sensors and electronic management.

Such systems are destined to become heavier and more complex yet, as additional equipment is installed to bring the catalytic converter up to operating temperature more quickly.

Consumer preference is imposing possibly the biggest burden. Electric windows and sunroofs, central locking, memory-adjustable seats and the like have led to a proliferation of electrical motors and other heavy hardware.

The scenario envisaged by motor industry engineers in the early 1990s was that

improvements in combustion technology would permit a "virtuous circle" to develop in terms of the whole vehicle.

Smaller, lighter engines could be built for no loss of power. These in turn would allow smaller, lighter components to be introduced elsewhere in the car. Because these would require less power to propel them, engine size could again be reduced without loss of on-road performance. And because the weight of all the mechanical elements of the car would be much reduced, the body shell itself could be made lighter and less complex because it would be subject to lighter loads and stresses.

As a consequence, fuel consumption would have diminished sharply. Instead, car weights, size-for-size, have increased - and left the industry searching for some form of engineering "quantum leap" to improve net fuel economy.

That leap may be imminent: in October commercial production began at the world's first plant for the volume production of aluminium car body structures.

Alumina Company of America (Alcoa) has invested DM120m (£50m) in the plant, at Soest in Germany, to supply the Volkswagen group's Audi car plant at Ingolstadt. They will form the skeleton of the new luxury Audi 300 saloon, of which Audi hopes to sell 15,000 a year from next spring.

The Alcoa plant has capacity for 100,000 structures a year, and other future Audis can be expected to have aluminium instead of steel bodies, with even mainstream, very high volume cars such as the Volkswagen Golf not ruled out as a longer term prospect for production in aluminium. The concept offers substantial weight savings over steel, and thus better fuel consumption - but at substantially higher raw material cost.

Mr Eric Winter, manager for automotive products at Alcoa's technical centre in Pennsylvania, says Alcoa is talking to "a number of automakers" about

similar projects in Europe and North America.

Mr Franz-Josef Paefgen, head of body development at Audi, leaves no doubt of his own conviction that the system provides the industry's needed "quantum leap" - which is exactly how he describes it.

A car's body, he declares, typically accounts for between 20 and 30 per cent of total vehicle weight.

The energy efficiency implications, he stresses, are important because a 10 per cent lighter vehicle yields a 7 per cent reduction in fuel consumption.

The body of the aluminium car, says Mr Helmut Timm, manager of Audi's fundamental concepts activities, is 40 per cent lighter than its steel counterpart would have been. In terms of the energy efficiency of car manufacture, another significant advantage of the aluminium structure is that it has only about one-third the number of body parts that a steel monocoque contains.

Thus not only does it require far fewer joints than the 3,000 spot welds which keep a typical steel-bodied family car together - a self-perforating riveting process is being used for the first time ever to assemble a car "body in white" (the basic shell structure), instead of spot welding.

The welding of aluminium is in any case difficult and requires high energy inputs. The riveting system, developed by Henrob, a small specialist company based at Flint in North Wales in partnership with Audi, is mechanical, quiet, generates no fumes and consumes relatively small amounts of energy.

Rivets, however, do have to be manufactured and purchased. And there is one energy disadvantage not suffered by steel: the completed bodyshell has to be heated to 210°C for 30 minutes to give it the required strength.

Other lightweight materials are being investigated in pursuit of greater efficiency, prominent among them magnesium and plastic composites. Like



Pollution concerns have led to heavier exhaust systems. Picture: Tony Anderson

aluminium, magnesium suffers from the drawback of requiring a much higher energy content than steel in its manufacture - although this is more than offset in the case of aluminium by the ease with which it is recycled. Recycling is also the biggest problem facing plastic composites. Thermoplastics can be melted down and used again, but only in lower grade applications (from a body panel to a coffee pot, for example). With other composites it is difficult to do much more with them than chop them up and burn them as an energy source.

Meanwhile, the steel industry is fighting back. Working with some vehicle makers, they have begun the development of car body engineering that they say could make steel bodies up to 30 per cent lighter.

The aim is to improve the rigidity-to-weight ratio of the body structure, thus identifying which parts could be strengthened in order to allow more of the body to be lightened.

Development of more energy-efficient engines and transmissions continues.

However, it is all too easy for laudable goals to be in conflict. Two-stroke engines such as those developed by Western Australia's Orbital Engine Company, are a case in point.

Two-strokes have no valves and thus none of the heavy and complicated components needed to operate them. The Orbital is half the size of a conventional engine of similar capacity and saves about one-

third the weight of a conventional unit. Size for size the engine is 10 per cent more powerful and 12 per cent more economical than its conventional rivals.

Ford has a fleet of around 20 Orbital-engined Fiesta cars operating in Europe as prototypes. But despite these obvious advantages in terms of energy efficiency, Ford is having increasing difficulty with exhaust emissions of the units and its hopes of using the engines in production cars of the mid- to late-1990s have been receding.

The problem is the amount of nitrogen oxides the engines emit.

With electrically-powered and other "alternative" fuelled vehicles also encountering increasing technological difficulties, there is an upsurge in popularity of the diesel engine in some parts of the world.

The diesel is changing its image rapidly from noisy, dirty and slow to a smooth and capable performer for most volume car applications - and with fuel economy overall at least 20 per cent better than that of a petrol equivalent. More significant, as traffic congestion increases, is that the diesel is at its most economical in stop-start urban conditions, when economy of a petrol engine is at its worst.

As drivers have become aware that the performance penalties of "driving diesel" are rapidly falling, so diesels' market share is rising in most countries. In the UK, where only a few thousands diesels were sold a decade ago, diesels now account for more than one in five cars sold - and the proportion is still rising.

Cogeneration proliferates, says Michael Smith

# The time has come

A century after Britain built its first combined heat and power plant, the concept is finally taking hold.

Within the past 10 years the number of CHP, otherwise called cogeneration, plants in the UK has increased more than fivefold to about 600, with about half of the growth coming in the last five years.

About 2 to 3 per cent of electricity is generated through CHP plants. If government targets are reached, the 2000 megawatts of electricity generated will more than double to 5000MW by the year 2000.

The appeal of CHPs is that unlike ordinary generators, they recapture the waste heat released during combustion, and use it to raise steam, hot water, heating, or more electricity.

They can thus produce heat and electricity at once and are much more energy efficient than ordinary systems. Whereas conventional power stations have an efficiency of about 35 per cent, CHP plants are up to 90 per cent efficient.

Their attraction is that they can reduce companies' electricity bills and contribute to improving the environment. According to the Combined Heat and Power Association each 1,000MW of cogeneration electricity displaces other forms of power generation and heat supply to save 1.25m tonnes of carbon emissions. It will also save on nitrogen emissions.

Cogeneration's growth in the past decade owes a lot to the development of technology, much of it in the UK, which makes it affordable to relatively small electricity consumers. The cheapest units can be installed for less than £40,000.

Most sites where CHP was installed in recent years use less than 1MW of electricity. There are about 400 schemes in this category, including hotel chains, leisure centres and hospitals.

Expansion among larger industrial customers has been less impressive. The economics of CHP schemes make them less attractive for large industrial concerns. Larger schemes have more difficulty in finding a use for the heat, typically three times the amount of electricity in megawatts, and are subject to more red tape.

There are about 150 industrial and commercial applica-

tions for CHPs in the 3MW to 50MW category in the UK as well as four urban schemes developed in conjunction with community heating.

Industries which require large amounts of heat, such as paper and chemicals, are suitable participants.

Thus, Hydro-Electric, the Scottish utility which is among the most active of the electricity companies in cogeneration, recently concluded a deal with Dover Harbour Board and Arjo Wiggins, the paper maker, for a £7.25m plant in Dover.

One of PowerGen's first forays into CHP was for the sup-

ply of 80MW of electricity and 200MW of steam to three paper factories in Kent.

PowerGen has recently formed a CHP subsidiary to coordinate such projects and is committed to investing £50m in cogeneration.

Mr Ed Wallis, chief executive, says that if it did not enter CHP projects others would and "we would lose share in the generation market".

He says his company is interested in about 40 per cent of what it expects to be a much enlarged CHP market at the end of the century, almost all of it among large industrial companies. Hydro-Electric, meanwhile, sees cogeneration as a way of earning non-regulated income in England and Wales and has already set up three schemes and identified more than 20 other potential sites.

While companies such as PowerGen, National Power, Scottish-Hydro and BP Energy are all competing in the market for relatively large industrial users, the regional power companies in England and Wales tend to specialise in smaller scale projects.

Three of them, London Electricity, Norweb and Northern Electric, are involved in joint ventures with Combined Power Systems, a company which was involved in developing the technology which made the economics of cogeneration work for smaller sites.

Most of the CHP operators,

whether operating in large or small projects, operate schemes whereby they install and maintain the units.

While all of this activity will in itself generate CHP growth, much of the proposed expansion will depend on factors outside the cogeneration industry's control.

Future developments will be strongly influenced by the relationship between the price of electricity and gas. Many proposed CHP plants are awaiting the government's review of the gas industry.

Most CHPs plants are gas-fired. Until industry can assess the likely effects of the gas industry changes on prices it will be reluctant to go ahead with proposed schemes.

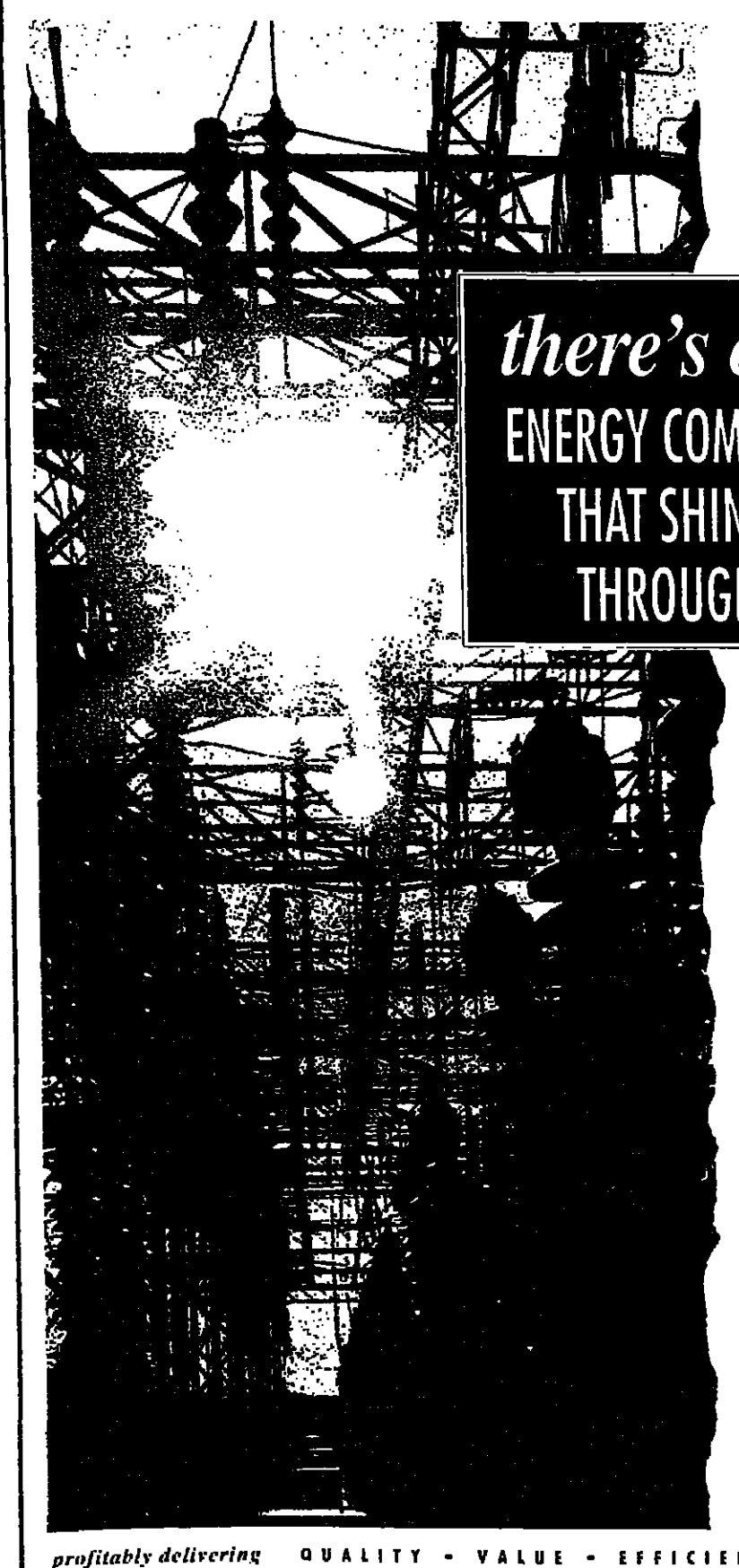
Ministers can also influence CHP growth through easing red tape and other restrictions surrounding their operation. "Generating power is technically quite simple but to set one up you need an extraordinary amount of documentation," says David Green, director of the Combined Heat and Power Association. "The government's drive to reduce red tape through the industry as a whole would help," he says.

Mr Michael Heseltine, industry secretary, showed readiness to oblige last month when he abolished restrictions on companies which generate their own electricity but consume less than 51 per cent of it. Previously they had to hold electricity supply licences which meant their sales were subject to the nuclear levy. From April 1 they will no longer have to.

The House of Commons environment committee welcomed such initiatives when it reported last month on energy efficiency in buildings, but it suggested far more could and should be done.

For example it wants the government to target "easy pickings" such as hospitals, prisons and military bases for potential CHP sites, and set a target for CHP in government use.

The committee suggested that ministers should be more ambitious about what could be achieved after the year 2000, noting that the government itself had identified an ultimate potential of 20,000MW of CHP. Four times the present target for the end of the century.



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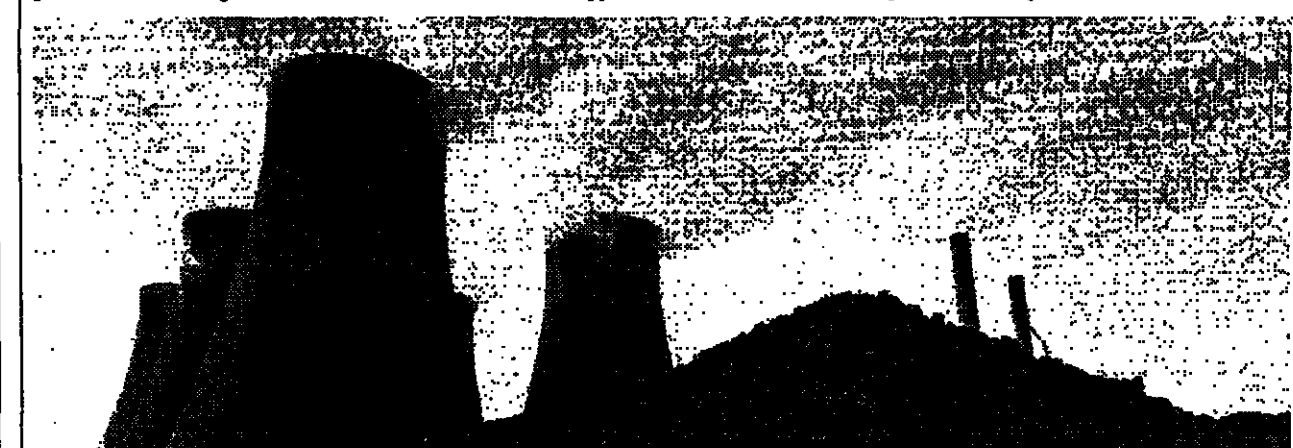
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Coal stocks at High Marnham power station. Today's dominant technology for coal-fired power stations dates back 60 years. Picture: Ashley Ashworth

## COAL COMBUSTION

# New hope for old smokey

Anyone in the UK could be forgiven for regarding coal as a dirty, dying relic of the industrial revolution, as the electrical generating companies dash to build gas-fired power stations and the country's collieries close at an unprecedented rate.

Such a parochial view would, however, give an entirely misleading picture of the international scene. Coal is maintaining its share of the global market for power station fuels - and more than \$1bn a year is being spent worldwide on research and development to make coal burning a cleaner and more efficient way of generating electricity.

Although soot and dust may be a local nuisance, the main pollutants on a global scale from burning coal are carbon dioxide, sulphur dioxide and nitrogen oxides. CO<sub>2</sub>, the main contributor to man-made global warming - is inevitably the primary product of the heat-releasing reaction of the carbon in coal with the oxygen in air. Its emission can be reduced by increasing thermal efficiency, but not eliminated.

On the other hand, SO<sub>2</sub> and NO<sub>x</sub> - the main causes of acid rain - are by-products of the combustion process. They arise from oxidation of sulphur and nitrogen impurities in the coal and nitrogen in the air. Clean coal technology offers far more scope for reducing SO<sub>2</sub> and NO<sub>x</sub> than CO<sub>2</sub> emissions.

Today's dominant technology for coal-fired power stations - "pulverised fuel" combustion - dates back 60 years. The coal is crushed finely and blown into a large boiler, its burning releases heat to produce steam to drive a turbine generator.

In practice, most pulverised fuel plants achieve thermal efficiencies in the 33-35 per cent range, although the very best (in Denmark and Japan)

manage to exceed 45 per cent efficiency. Further increases in efficiency, accompanied by reduced NO<sub>x</sub> and SO<sub>2</sub> emissions, can be expected in future through a range of improvements in combustion conditions, the steam/water circuit and turbine design.

But the main emphasis in clean coal research is not on improving traditional pulverised fuel technology but on two newer approaches: fluidised bed combustion (FBC) and gasification. Walt Patterson, energy analyst, describes the "impressive progress" on both fronts in a new FT Management Report on coal technology.

"Many of the world's largest engineering firms are pursuing technologies based on these concepts, dedicating major commitments of finance, skills and time," he says. "Their efforts are bearing fruit. New units continue to come on stream around the world month by month; many are achieving impressive records for reliability, efficiency, fuel flexibility and emission control."

FBC is the further developed of the two approaches. It involves mixing powdered coal in a bed of pulverised limestone which acts as a chemical trap for any sulphur emitted from the fuel. The bed is kept in constant motion, like a boiling liquid, by a strong upward flow of air. Steam produced by boiler tubes in the fluidised bed drives the main generating turbine; the hot

exhaust gases may drive a second turbine.

The main variants for power generation are circulating FBC (CFBC) in which the air flows so fast that the bed loses its upper surface and fills the combustion chamber with a turbulent cloud of fine particles, and pressurised FBC (PFBC) in which the whole chamber operates at between five and 20 atmospheres pressure.

CFBC is already fully commercial, with more than 100 units operating worldwide. The technology makes it possible to burn dirty and low-grade coals. Many CFBC plants have been built within cities for cogeneration - producing both electricity and heat (for district heating or industry). The largest so far is a 165MW unit at Point Aconi in Nova Scotia, Canada.

PFBC has only just crossed the commercial threshold, led by ABB Carbon, the Swedish power engineering company. Three successful PFBC demonstration plants in Stockholm, Escatron (Spain) and Tidd (Ohio, USA) will be followed by a fully commercial 350MW plant at Karita, Japan.

The principle of turning coal into a fuel gas - reaction with steam and oxygen to produce a combustible mixture of hydrogen, methane and carbon monoxide - has been known and applied since the last century, when coal gas lit Victorian cities. But it is only now being developed for power generation, in the form of integrated gasification combined cycle

(IGCC) plants. In IGCC, the hot coal gas passes through a chemical cleaner to remove pollutants and generates electricity in a gas turbine. Meanwhile waste heat from the turbine and gasifier raises steam to drive a second turbine.

An important milestone for IGCC will be the start-up scheduled for this winter of a 250MW demonstration plant, designed by Shell, at Bungen in the Netherlands. Several other IGCC plants are under construction in Europe and the US (where the federal Clean Coal Technology Programme is funding five).

Both PFBC and IGCC promise thermal efficiencies at least as high as the best pulverised coal plants, with much better control of SO<sub>2</sub> and NO<sub>x</sub>. But it may be possible to go further by combining the best features of each approach. Hybrid designs such as British Coal's experimental "topping cycle" would run a gas turbine at very high temperature and a steam turbine at lower temperature, given further progress in turbine technology, this could raise overall efficiency above 60 per cent.

A more futuristic prospect is to combine gasification with a fuel cell, which would generate electricity directly from the chemical reaction between fuel gas and oxygen, like an extremely hot battery, without the need for a gas turbine. Experimental 2MW coal gas fuel cells are due to be operating in the US by 1997. The "integrated gasification fuel cell" could ultimately achieve an efficiency of 60 per cent - offering a reduction of one quarter in CO<sub>2</sub> emissions compared with today's best coal-fired power stations.

\*Coal-Use Technology, Financial Times Management Reports, £249/£413.

Clive Cookson

مكتبة الامير



## THAILAND

Tuesday December 7 1993

● Fresh economic growth as the country shrugs off the gloom in its main export markets: Page 2

Thailand's fragile coalition government has embarked on a policy of decentralisation which should ease congestion in Bangkok while providing more jobs to the poorer, outlying provinces, reports Victor Mallet

## New incentives for investors

After just a year in power the Thai government has felt obliged to publish a 48-page brochure about its achievements - a sign more of insecurity than of overweening pride in its accomplishments.

Mr Chuan Leekpai, the Democrat Party prime minister who was elected last year following the army's slaughter of pro-democracy demonstrators and the collapse of a government sympathetic to the military, has restored a measure of political stability to Thailand over the past 15 months.

The mild-mannered Mr Chuan has held together a fragile five-party coalition - one of the original partners has been swapped for a smaller but more amenable party - but has been criticised for indecisiveness and a failure to tackle with sufficient vigour the various problems facing the country and its fast-growing economy.

Mr Chamlong Srimuang, the devout Buddhist who was one of the leaders of last year's pro-democracy uprising, complains that the government has not done enough to help poor farmers, combat crime or put an end to the traffic congestion that plagues the capital Bangkok.

"Right now the government still doesn't have any clear-cut solution for those issues," says Mr Chamlong. It is a measure of Mr Chuan's political difficulties that Mr Chamlong's own Palang Dharma (Moral Force) party is not - as one might infer from his critical comments - in the parliamentary opposition, but rather one of

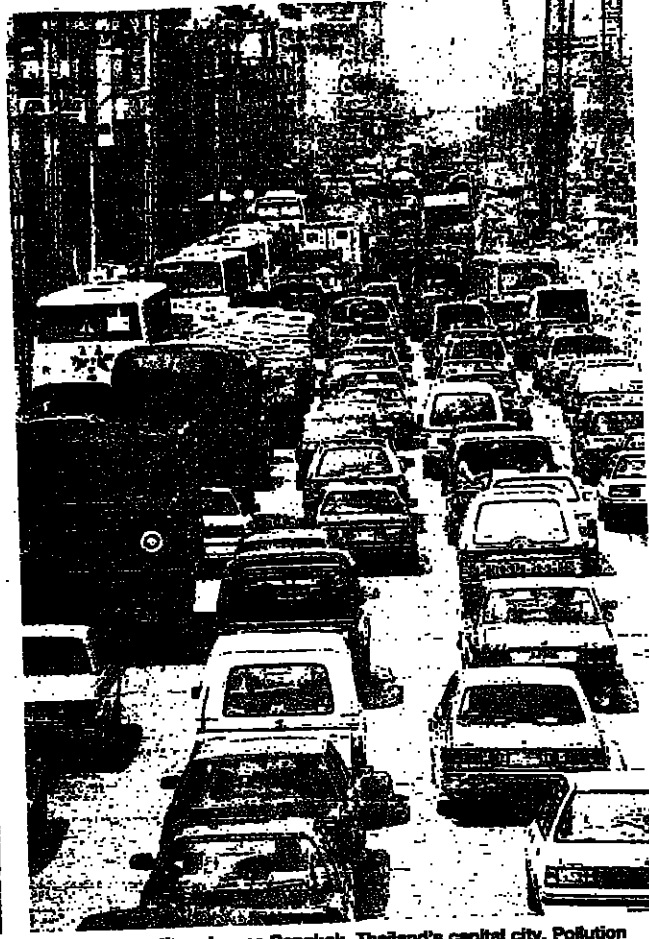


Prime minister Chuan Leekpai heads a five-party coalition

the parties in the ruling coalition.

Yet, given a political climate in which most of the headlines have been made not by discredited opposition parliamentarians but by in-fighting between coalition partners seeking to enhance the influence of their ministerial fiefdoms, it is perhaps remarkable that Mr Chuan has achieved anything at all.

The mere survival of the government for more than a year is regarded as noteworthy. "In Thai politics this is considered an achievement for a democratically-elected government," comments Mr Sukhumthand Paribatra, one of Thailand's leading political scientists. According to Mr Supachai Panichpakdi, deputy prime minister, no elected government in



Traffic congestion plagues Bangkok, Thailand's capital city. Pollution levels are officially classified as 'dangerous' - see report, page three

Thailand has survived its full four-year term. "Somebody will have to break this jinx," he says.

Government officials such as Mr Supachai insist that they have achieved much more than the disenchanted public gives them credit for; hence the need for the brochure.

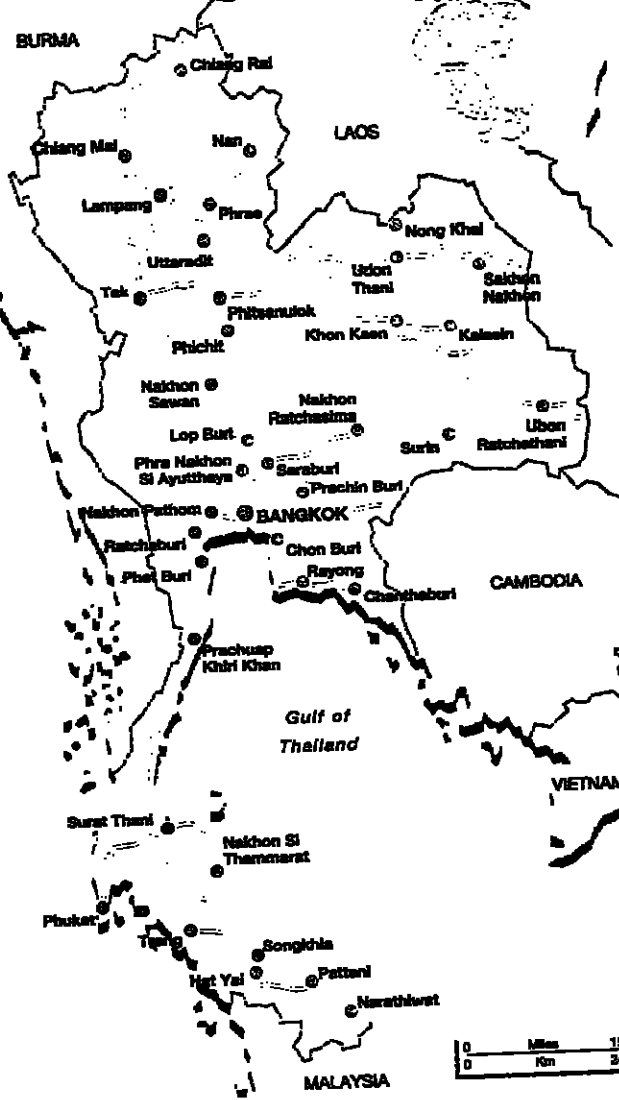
As promised in the election campaign, the government has embarked on a policy of decentralisation which should ease congestion in Bangkok and the eastern seaboard at the same time as bringing more jobs to the poorer, outlying provinces.

To do this, the authorities have increased incentives for investors who build factories in remote areas, and promoted cross-border economic co-operation schemes that should benefit frontier towns

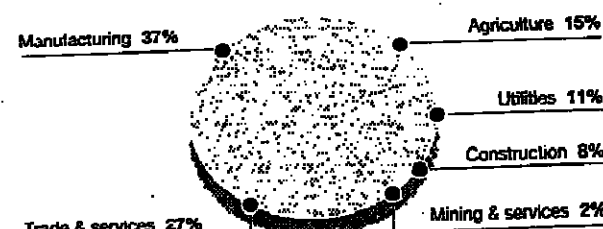
such as Chiang Rai in the north and Hat Yai in the south, although plans to decentralise policies by having more local officials elected rather than appointed have made only slow progress.

Mr Chuan has campaigned against child prostitution, tried to keep the armed forces out of business and politics, and refused to be provoked into hasty action by an outbreak of sabotage and shootings in the south (in which Moslem separatists appear to have been exploited by disaffected right-wing politicians and security force officers).

The Thai economy has thrived for years under dictatorial as well as democratic governments, but Mr Chuan's coalition can justifiably claim to have fostered continued eco-



Shares of GDP 1992



Source: National Economic and Social Development Board

stern test of the government's popularity.

The government has at least made a tentative start to reforming the educational system after decades of neglect by previous administrations. Schooling will be compulsory for nine years instead of the current six, and the state is to co-operate with the private sector on vocational training.

Businessmen and academics agree that a complete overhaul of Thai schools and universities, which teach by rote and discourage initiative in the workplace, is vital if the Thai economy is to continue competing effectively with its equally dynamic Asian neighbours.

With wages rising and mechanisation on the increase, Thailand is already losing its cheap labour advantage to countries such as China and Vietnam, and therefore needs to enhance the technical skills of its workforce.

"In the near-term, we cannot hope to match Korea or Japan in terms of raising our workers' standards or our technical standards," says Mr Tarrin Nimmanhaeminda, the finance minister. "But we certainly hope more than to keep up with southern China, Indonesia and elsewhere."

Thailand's manufactured exports are still rising sharply, but Thai industry is poised at a point where it can rely neither on cheap labour nor on high technology but only on a balance between the two.

"We have to be piggy in the middle," says Mr Richard Han, chief executive of Hana Microelectronics in Bangkok. "The type of work we seem to be winning is the type which

requires a fair amount of manufacturing discipline and process but still requires a fair amount of labour."

With so many unsolved problems on the agenda - including inadequate schooling, Bangkok's transport crisis, bureaucracy and corruption in the civil service, environmental degradation, and rural poverty - it is hardly surprising that siren calls for a return to "strong" government are starting to be heard in Thailand.

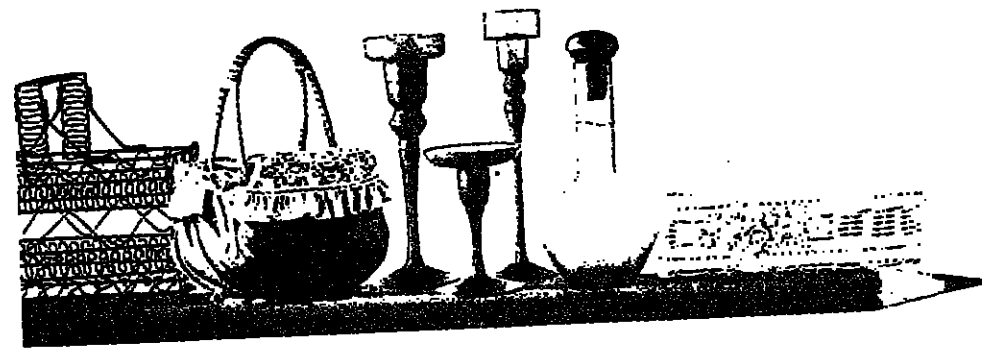
Such views reflect an emerging Asian orthodoxy, under the patronage of Mr Lee Kuan Yew, Singapore's elder statesman, which suggests that enlightened authoritarian rule is better for decision-making and political stability in Asian countries than western-style liberal democracy.

"I think democracy has problems everywhere," says Mr Anand Panyarachun, Thailand's own enlightened authoritarian, who was praised for his work as prime minister after being appointed by the military following a 1991 coup d'état. He has recently hinted that he would not mind doing the job again.

Others point to the particular weakness of Thai political parties: they lack ideological underpinnings, tend to be tied to a particular military leader or politician, and come and go with bewildering speed.

If Mr Chuan, grappling with his fragile coalition on the one hand and the ambitions of the opposition and the armed forces on the other, succeeds both in surviving his full term and in carrying out even half of what he intends, that will be an achievement indeed.

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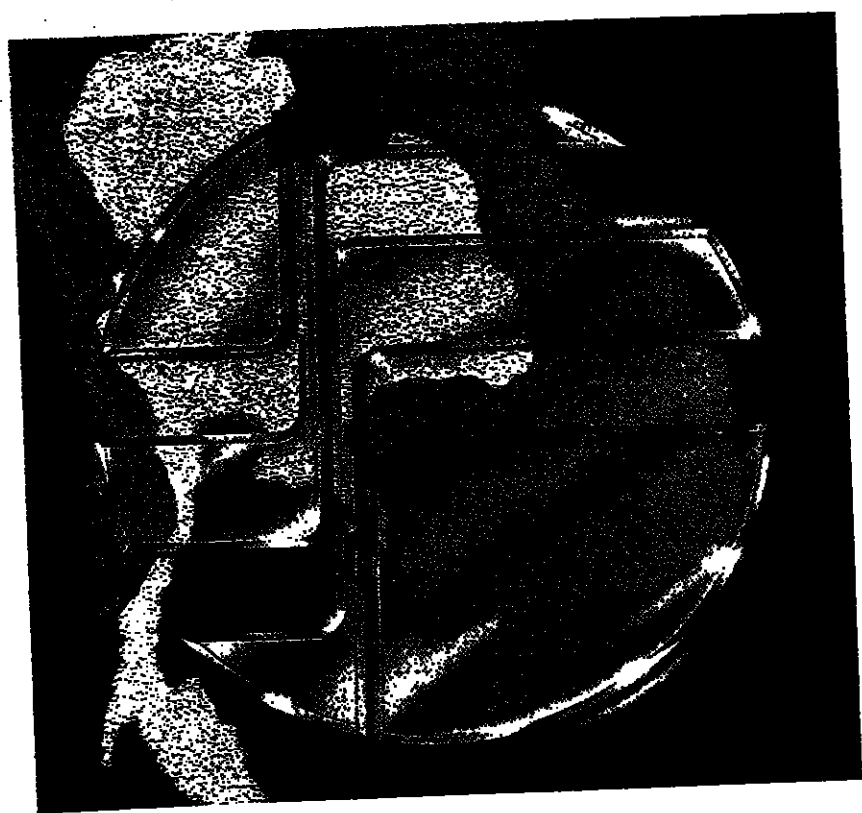
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## THAILAND 2

The economy: expansion continues unabated

## In pursuit of 'even' growth

Thailand has shrugged off the gloom in its main export markets, reports Victor Mallet

When Thais talked about a "slowdown" last year, they meant that real economic growth had dipped to just over seven per cent annually. Now they are talking about a "recovery".

Like other fast-growing economies in south-east Asia, Thailand has shrugged off the gloom in its main export markets, a gloom particularly evident in Europe and Japan.

Total Thai export growth will slow to an estimated nine or ten per cent this year - compared to the official forecast of

Agencies are predicting real GDP growth of at least 7.5 per cent this year

15 per cent - but that is a result of lower agricultural commodity prices; exports of electronic goods and other manufactured products are still rising strongly.

Economic growth has in any case been driven largely by increasing domestic activity and consumption. Government agencies are predicting real gross domestic product growth of at least 7.5 per cent this year (compared to 7.3 per cent in 1992), rising to nearly eight per cent next year.

"The domestic economy has been the engine of this year's growth," says Mr Tarrin Nimmahaminda, the finance minister, in an interview. "As GDP per capita rises above a certain level, you begin to have synergy and dynamism in the internal market."

Mr Tarrin is anxious to see the Uruguay round of world trade talks successfully concluded by the end of this year to ensure relatively open markets for Thailand's exports, but he has few reasons to be worried about the overall state of the domestic economy.

Balance of payments in million baht			
	1990	1991	1992*
Trade balance	-255,137	-247,618	-205,380
as percentage of GDP	-12.4	-10.4	-7.5
Merchandise exports, f.o.b.	583,206	720,545	815,202
Merchandise imports, c.i.f.	838,343	968,163	1,015,485
Non-merchandise gold imports	5,739	4,284	5,086

Note: \* = total imports adjusted for balance of payments coverage, official gold imports and other imports; \*\* indicates 1992 provisional estimates, data source Bank of Thailand

Thailand enjoys a perennial budget surplus (although Mr Tarrin points out that the Thai budget does not include the operations of large state enterprises which use deficit-financing), while low food and crude oil prices have kept inflation remarkably subdued during a period of such high growth. By the end of the year, inflation should be between 3.6 and 3.7 per cent, Mr Tarrin says.

Thai concerns about falling investment over the past two years, and about the competition for investment funds from other booming Asian economies such as China and Vietnam, have been allayed by a recent sharp rise in applications to the Board of Investment (BOI).

Project applications were worth Bt524.74bn in 1990, falling to Bt281.98bn in 1991 and Bt213.07bn in 1992. But since the second quarter of this year, the sheer of applications at the BOI's headquarters in Bangkok has grown more thick month by month, and the value of applications reached Bt201.96bn in the nine months to September.

Japanese companies are among the most active investors. The strength of the yen, and the attractiveness of the Thai domestic market with its 70m inhabitants, has prompted Japanese multinationals such as Toyota to expand existing operations; smaller Japanese concerns - component manufacturers, for example - are also seeking cheaper locations away from their home base.

One Japanese bank in Bangkok is said to be dealing with more than 70 Japanese companies investigating opportunities in Thailand.

Bankers say that rising foreign direct investment, and a burst of portfolio investment into the stock exchange, have helped to produce a surge of

liquidity in the Thai economy since the third quarter, forcing down interest rates.

The trend towards lower rates has been accentuated by the current vogue for listed Thai companies to raise money through issuing "Euroconvertible" debentures denominated in US dollars.

The Thai financial authorities, ever watchful of inflation and concerned about the low savings rate (private saving was 21 per cent of GDP in 1992), are ready to push up interest rates next year if necessary. In the meantime, the government is planning a number of economic reforms to improve the international competitiveness both of Thai industry and of the financial sector, a process accelerated by US demands for more access to the services business in developing countries.

"Industrialisation will not hold the total key to our future," says Mr Tarrin, the former president of Siam Commercial Bank. "Trade and finance and the service sectors will play a very important role."

Banking, hitherto dominated by the 15 listed Thai commercial banks, will be gradually liberalised, partly by allowing offshore banking licence holders under the new Bangkok International Banking Facility to increase the scope of their activities.

For the industrial sector, the government is proffering both a carrot and a stick. Import tariffs for raw materials are to be lowered, but there will also be gradual reductions in tariffs for finished and semi-finished goods in the years ahead.

"What you will see in the longer term - say three years from now - is a much freer market, much more vibrant imports," says Mr Tarrin. "Yet you'll begin to see more invest-

ments taking advantage of this and turning it around to exports."

Another government priority is to narrow the gap between rich and poor, a field in which Thailand has been notably less successful than its south-east Asian neighbours; wealth is concentrated in Bangkok and on the nearby eastern seaboard, and hundreds of thousands of people from poor farming families in the north-east migrate to the capital to find work as factory workers, domestic servants or prostitutes.

"We have a situation where 60 per cent of the population is engaged in agriculture, but agriculture produces maybe 13 to 14 per cent of our GDP now. That tells you right away that our income gap is huge," says Mr Tarrin.

The centralisation of industry and commerce around

The government wants to ensure that wealth and jobs are spread throughout the country

Bangkok has also caused problems for businesses and residents in the form of traffic congestion and pollution.

But the announcement in April of enhanced BOI incentives for investors in "zone three" areas away from Bangkok and its environs (zones one and two) appears to be bearing fruit.

According to Mr Saporn Kaviton, BOI secretary general, 80 per cent of the applications from potential investors received in the first 10 months of this year indicated an intention to locate factories in zone three - "we are encouraging the relocation of existing industry in zones one and two," he says.

Rapid economic growth in Thailand seems likely to continue unabated, but the government wants to avoid the mistakes of its predecessors and ensure that wealth and jobs are spread throughout the country.

"We will not pursue a high growth policy," says Mr Tarrin. "We will pursue an even growth policy."

Reforms continue on the Thai stock market

## Watchdog to the rescue

Thailand's stock market now has more appeal for hard-headed realists, writes William Barnes

Mr Ekamol Kiriwat, the forceful head of Thailand's 18-month-old Securities and Exchange Commission (SEC), finds a robust good humour useful - "I've really tried to explain what 'disclosure' means to some big players. They obviously thought I was quite mad!" he says with a smile.

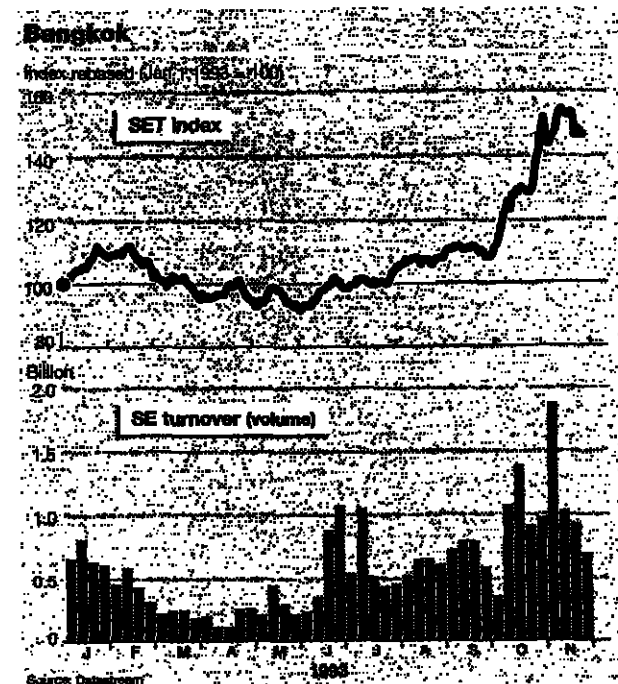
Yet the bark of Mr Ekamol's 18-month-old watchdog has clearly helped foreign and institutional investors concentrate more on underlying value than on the insider knowledge and share-ramping that used to be the driving force in share trading.

At the beginning of the 1990s a consensus emerged among government regulators, including the Bank of Thailand (the central bank), and institutional investors that the Thai stock market's traditional shenanigans could no longer be tolerated. It was agreed the market needed to be less fun for privileged insiders and more appealing to hard-headed realists, both at home and abroad.

Mr Ekamol likes to point out that in a country with a chronic capital shortage, "it's a privilege for anyone to get capital, to get scarce money. That's why I want to be very straight on the stock market and the debt market - I believe in real finance."

After enduring predictable "paper tiger" jibes, the SEC pounced on three groups of alleged share manipulators in late 1992 and early 1993. Although there is no sign that anyone will be convicted soon, the move quickly deflated a speculative market to the horror of many individual investors.

A tentative revival of optimism towards the middle of the year was squashed by unexpectedly bad second quarter corporate earnings. But, buoyed by continued strong economic growth, investors regained their nerve as the second half of the year progressed.



recessed. Towards the end of September, the momentum suddenly gathered pace as foreign institutions, some of whom had never given Thailand a second look, started buying Asia and the Stock Exchange of Thailand index proceeded to romp through all previous records.

From the beginning of October to mid-November, the SET index surged by 38 per cent, easily outstripping rival markets in the region during the period despite having the worst expected earnings growth figures for 1993 (4 per cent - or minus 10 per cent excluding the profitable banking sector - compared with Singapore's 14 per cent and Hong Kong's 15 per cent earnings growth).

Mr Peter Emblin, the investment vice-president of local fund managers One-Investment Management, said: "Prices have been driven falling interest rates so far. I think the market's now waiting to see if corporate earnings can pick up as we go into 1994 after which there could be a second lift in prices."

SBCI's director of South-East Asia Research, Mr Edward

flagship of the sprawling Chearavanont family empire, CP Feedmill, whose relatively opaque management makes analysts suspicious. Even newly-privatised Thai Airways International's forecasts have been far too optimistic.

There are, however, plenty of large companies coming to the market for finance. Foreigners over-subscribed 17 times for the tranche of TelecomAsia allotted to them, and the shares should start trading mid-December.

Although part of the CP empire - and perhaps overpriced - TelecomAsia is in a potentially lucrative sector and holds a concession to install two million desperately needed telephones in Bangkok.

Also arriving soon - and providing a change from the old staples of the Bangkok market such as banks, cement companies and property developers - are telecommunications companies Loxley and UCOM, a soon-to-be-privatised subsidiary of the Electricity Generating Authority of Thailand, and National Petrochemical Corp.

The biggest technical issue still facing foreign investors are the limits placed on foreign ownership of listed companies. Officials' ideas for circumventing these legally - by so-called Mexican trusts, for example - have yet to bear fruit.

But there is still plenty of local money waiting to get into the market when the time is right. Mr Rob Collins, research director of Asia Equity, says newly-established local mutual funds have raised Bt35bn which has yet to be placed.

Some admire the Thai market because it is not as highly regulated as Singapore and has liquidity that puts it ahead of Taiwan and South Korea, but critics say the SEC has only scratched the surface of the wrongdoing that continues to undermine the SET.

The head of one foreign brokerage house in Bangkok said: "The SEC has stopped the utterly outrageous things like the huge share ramps, and the relentless churning that went on. But a lot of monkey business goes on which will have to be dealt with soon."

Thai company profile: Christiani &amp; Nielsen (CNT)

## Fresh opportunities for expansion

The engineering group is intent on extending its operations in the world's fastest-growing economic region, reports Kieran Cooke

Christiani & Nielsen was until recently one of Denmark's most well established construction and engineering groups. Now it is Thai.

Late last year, the group's Thai subsidiary made a

reverse takeover of its Danish parent. The company, referred to as CNT and listed on the Bangkok stock exchange since 1991, now bills itself as the only Thai-owned international engineering concern.

"The takeover was the natural outcome of what was happening on the ground," says Mr John Millard, the group's chief executive. "The parent company was very Euro-focused, yet this part of the world is where the action is... we felt frustrated that many opportunities in this region were not being taken up."

While the European parent encountered a series of problems, including large-scale losses in South America due to currency devaluations, business was expanding rapidly in Thailand.

Mr Millard says about two thirds of group revenues now come from the Asia region. Turnover has risen from Bt300m in 1988 to a projected Bt650m this year. CNT now employs about 5,000 people: 4,500 of them are in Thailand. CNT has been active in Thailand for many years. Among other projects, it built the Democracy Monument in Bangkok - one of the nation's political focal points over the years - and it developed the country's main port at Klong Toey near Bangkok.

Latest projects include a Bt2.45bn shopping centre near

Bangkok and possible involvement in an elevated rail system in the capital.

"If we'd stayed in our original home base, the market would have been limited and the competition intense," says Mr Millard. "But with our IQ base we can call on our European technical skills and use them in a more flexible way to search out opportunities around the

Last month, CNT was awarded a M\$162m (\$63m) contract to expand the port at Klang, near Kuala Lumpur in Malaysia

region. We will probably also start looking at South America again in the near future."

Some analysts are concerned that CNT might try to expand too fast and not complete what is considered to be a much-needed overhaul of its loss-making European businesses. There are also worries about CNT's exposure to the highly volatile property sector in Thailand.

But the group is intent on expanding its operations in the world's fastest-growing economic region. Recently it has become involved in a \$300m joint venture project in northern China. Last month, CNT was awarded a M\$162m (\$63m) contract to expand the port at Klang, near Kuala Lumpur in Malaysia.

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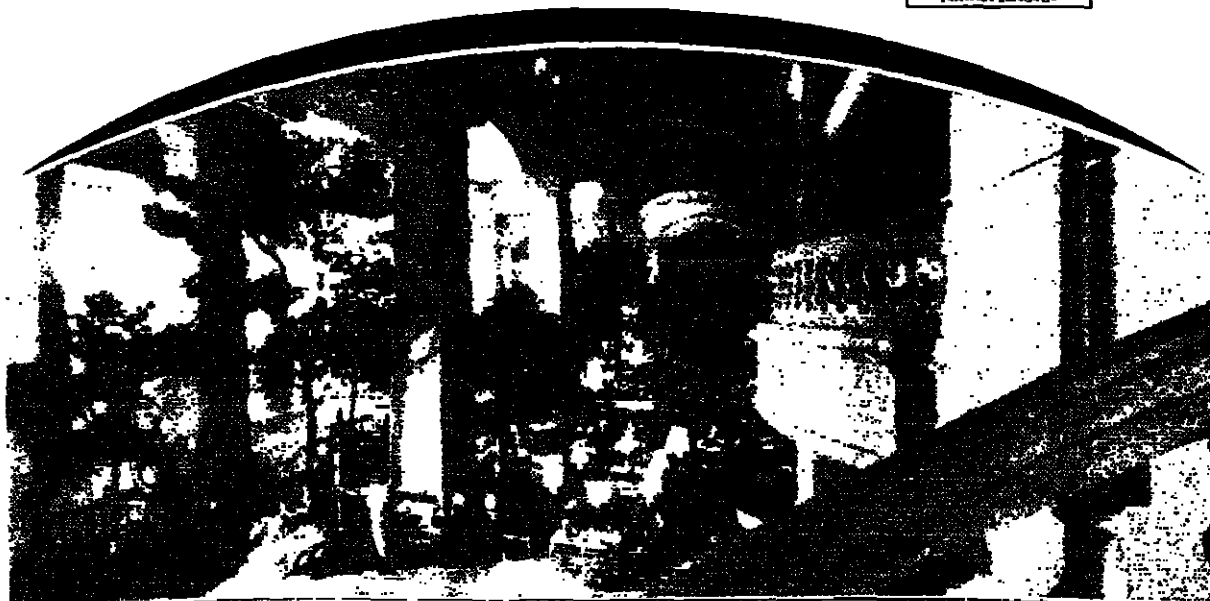
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## THAILAND: KEY FACTS

Area	513,115 sq km
Population	58.5 million
Head of state	King Bhumibol Adulyadej
Prime Minister	Chuan Leekpai
Currency	Baht
Average exchange rate	1992 \$1=25.45 Aug 1993 \$1=25.23

## ECONOMY

	1992	1993
Total GDP at current prices (in Baht billion)	2,800	3,101
Annual average % growth in		
Real GDP (%)	7.2	7.5
Consumer prices (%)	4.1	3.7
Industrial production (%)	8.7	9.2
Govt. bond yield (%)	10.75	10.75
Tourist arrivals (million)	5.14	5.40
Tourism income (Baht bn)	123	130
Govt fiscal position (Baht bn)		
Revenue	497.9	436.8
Expenditure	445.6	452.5
Balance	52.3	-15.7
Total reserves minus gold (\$bn)	21.2	23.9
Trade (Baht bn)		
Current account balance	-189.9	-113.2
Exports	915.4	502.8
Imports	1,020.6	654.1
Trade balance	-205.2	-151.3
Main trading partners (%)		
US	22.4	11.7
Japan	17.5	29.3
Singapore	8.7	7.3
Hong Kong	4.6	1.2
Malaysia	2.6	3.9
Taiwan	1.9	5.5
United Kingdom	3.6	2.3
European Union	19.6	14.4

(1) All 1993 figures are estimates unless otherwise stated.  
(2) 1993 Jan-July average. Trade 1993 Jan-July total.  
(3) Output-average growth over 12 months to May 1993.  
(4) Oct 92-Jul 93 (part fiscal year).  
(5) % share in 1992.

Sources: Bangkok Bank Monthly Review, IMF, Datastream.

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Other Thai trade centres in Europe are located at Frankfurt tel 49 69 281 091; Milan, tel 39 2 669 81756; Rotterdam, tel 31 10 415 8663. The UK centre (see above) has details of all other European offices. Centres in Japan are based at Osaka, tel 81 6 262 4418 and in Fukuoka, tel 81 92 751 6311. Other international centres are located in New York, tel 1 212 468 1777; Vancouver, tel 1 604 687 6400; and Sydney, tel 61 2 241 1075.

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Kuala Lumpur	MPH	3-757 5691	3-757 5361
Manila	WTNS	2-874 946/8	2-810 8967
Seoul	UFA	2-734 3903	2-739 0054
Singapore	MPH	453 8200	457 0314
Taipei	Taiwan English Press	2-775 3456	2-741 7863
Tokyo	Financial Times (Japan) Ltd	3295 1711	3295 1712

FINANCIAL TIMES

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'Bangkok's traffic congestion and pollution are just about the worst in the world - ever. Never in history have people had to live in the conditions we endure each day.'

- Bangkok Post, November 18, 1993

Bangkok struggles with severe infrastructure problems

## Victim of the nation's success

Bangkok residents are obsessed with the city's traffic problems. The visitor is regaled with a grim menu of facts and figures - pollution levels in the city are twice the acceptable level and are officially classified as 'dangerous'. The city, along with its roads, is sinking.

Each day about 500 new cars and 450 motorbikes join the traffic on the city's gridlocked streets. In most cities about 25 per cent of the land area is devoted to roads. In Bangkok it's only about eight per cent.

During the great Bangkok traffic jam in July last year - after a heavy rainstorm - some schoolchildren were stuck in traffic for most of the night while a trip from the airport to central Bangkok, a distance of under 20kms, took five and a half hours.

Despite the chaos, life in Bangkok goes on - just. People have adapted. To avoid peak hour traffic, children arrive at school at 6am for an 8am start. Secretaries go to work sitting side saddle on the backs of taxi

motorbikes. Every business person has a mobile phone - some, a mobile office.

Over-centralisation is the main cause of Bangkok's problems. More than two-thirds of Thailand's urban population lives in Bangkok.

Political power rests in the capital. Bangkok is also Thailand's economic powerhouse: economists calculate that the city and its environs account for up to two thirds of the country's GDP.

"Bangkok is the victim of Thailand's success" says Mr David Hendrix, General Manager of Citibank, Thailand. "The Thai economy has been growing at about 8 per cent each year. In Bangkok that translates to about 14 per cent - that's too much for anywhere to handle."

Bureaucratic inertia has been another factor contributing to Bangkok's woes. Mass transit systems have been talked about for more than 20 years. At present at least three projects are on the drawing board. Apart from some rather desultory piling work on one scheme, no work is going on.

A maze of overlapping and rival authorities governs Bangkok - "it's like driving a bus with 16 hands on the wheel," says one official.

Then there's been the dark hand of politics. Governments in Thailand have come and gone. Each has had its own agenda for solving Bangkok's problems. Deals have been made, then rewritten by a successor administration, then abandoned.

Along the way, various politicians are reported to have made substantial amounts from contract awards.

In the late 1980s the government decided to go ahead with two expressway projects in Bangkok on a build, operate, transfer, basis. The expressways are Thailand's first venture into BOT projects: both deals have run into serious problems.

The Bangkok Expressway Co (BEC), a consortium 65 per cent controlled by Kumagai Gumi of Japan, entered into an agreement to build and operate a 20km stretch of expressway, plus an additional 12km to be merged with an existing network.

The first \$500m phase of the project was completed in March 1993. But from then till the beginning of September, the expressway lay empty - used only by joggers and cyclists.

BEC and various govern-

ment agencies had become involved in increasingly acrimonious disputes about toll charges, about who should operate the expressway, about the government's failure to deliver land necessary for the project on time - which resulted in big losses for BEC.

When government efforts to persuade BEC to open the expressway failed, the authorities, armed with a court order, opened the road themselves. Motorists flooded onto the expressway, promptly causing yet another traffic jam.

BEC and Kumagai Gumi in particular, accuse the authorities of breaking virtually every contractual rule in the book. "Either they don't understand BOT or they hate the whole idea," says Mr Takao Ninomiya, BEC's managing director.

For their part the authorities say BEC has misinterpreted the terms of the original contract. A stand-off has developed. The end-result is likely to be either a law suit between the various parties, or a forced buy out of BEC by local banks, supported by the government.

Don Muang Tollway, stretching out towards the airport north of Bangkok, is another problem project, also BOT.

One administration said funding for the \$450m project could all be raised in Thailand. A successor administration said half the funding had to be raised offshore: that held up the project for several months.

The project's planning seemed to be seriously at fault. The government refused permission to demolish existing flyovers which were in the way of the expressway's construction. Because of traffic problems, contractors are only allowed to carry out large scale work between midnight and 5am.

The Don Muang Tollway is already well over budget and more than a year behind schedule. To add to the problems of both projects, the banks, frightened by the problems encountered, have curtailed their lending. Questions have been raised as to whether investors, particularly foreigners, will now be willing to become involved in similar BOT schemes, given the painful history of these two projects.

But it is not all gloom and doom. Bangkok's problems have overshadowed the large scale infrastructure projects that have been successfully completed in other parts of the country. Other capital cities in the region, such as Kuala Lumpur,



Dilapidated houses on the Chao Phraya River, Bangkok: more than two-thirds of Thailand's urban population lives in and around the city. Bureaucratic inertia has contributed to Bangkok's woes. Sarah Murray

pur, Jakarta and Manila, are facing similar, if not quite such critical, problems.

The new Thai government has pledged to tackle, once and for all, the traffic congestion that is choking Bangkok to

death. But residents, who show remarkable stoicism in the face of the deteriorating conditions in the city, are sceptical. "Even if they started building a mass transit system now, the work would bring Bangkok

to a standstill," says one long-time resident. "In the end, we'll just have to lock up, throw away the keys and move somewhere else."

Kieran Cooke

Tourism industry: facing a shift in fortunes

## Not like the old days

These are difficult times for many Bangkok hoteliers, reports William Barnes

The general manager of the venerable Oriental Hotel, Mr Kurt Wachtveit, sent his staff a private notice this summer warning them this was the worst season of his 25 years at the hotel.

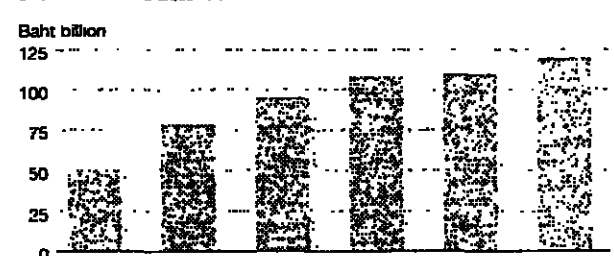
"Room rates are falling every week and the competition is getting fiercer and fiercer," he wrote.

Although the dapper Austrian's hotel is sometimes voted the best in the world, he was forced to remind staff to treasure customers as never before to prevent them slipping off to one of the Oriental's rivals.

"We simply cannot afford an unhappy client. Once clients know that our business is down, they will become more demanding, seeking discounts, wanting more service, pampering and better facilities."

The Oriental, like all Bangkok hotels, has been hit by the global recession: much sharper competition from regional rivals like Malaysia, Indonesia and China; a rapid increase in the number of hotel rooms and, critically, by the fact that

Revenue from tourism



Source: Tourism Authority of Thailand

Thailand has lost some of its appeal as a tourist destination.

Thailand's luck this year - a dramatic surge in Asian tourist arrivals - hardly compensates for plans laid during the days of high-spending foreigners.

Mr Vinai Ruenjaruwatana, the head of Sunshine Tours and the chairman of the Phuket chamber's tourism committee, said: "Don't be fooled by all this activity - that's only been achieved by cutting rates to the bone. We're filling hotels with 'low quality' tourists who don't spend money and wreck the rooms."

This is a far cry from the late 1980s when - helped by a highly successful "Visit Thailand Year" promotion in 1987 - hoteliers could give out rooms

like prizes. Mr Vichit Na Ranong, owner-manager of the Pearl Village Resort Hotel in Phuket and president of the Phuket Hotel Owners' Association, remembers that in those days "agents were so desperate to find accommodation they said, 'just get me the rooms - we'll sort out the price later'. Wonderful."

The tourist industry in Thailand soared in the second half of the 1980s when Thailand - helped by a longish stretch of political stability and the 1987 promotion - suddenly became a favoured exotic holiday destination. There were double digit increases in annual tourist arrivals from 1986 to 1990, with an almost 24 per cent jump in

Continued on next page

## High profits for Thai banks

It is rare for commercial banks to be allowed to make such consistently high profits as Thailand's: the top six banks could triple their combined profits between 1990 and 1994.

The conservative central bank, the Bank of Thailand, waged a short but surprisingly sharp and public campaign with the 15 listed banks earlier this year over their stunning profits, with central bankers even quoted in the Thai press as accusing the commercial banks of "ripping off" their customers.

Most Thai banks started life either as the financing arms of Sino-Thai business empires or to cater for an institution like the military, as in the case of

The top six Thai banks' profits in billion baht

Year	Net profit	Percentage change	Loans (Bt bn)	Percentage change
1991	17.10	25.8	1,429.2	20.8
1992	27.08	58.3	1,891.8	18.6
1993 estimate	35.41	30.8	2,002.5	18.4
1994 estimate	39.51	11.6	2,383.1	18.3

Thailand's top six banks with total estimated assets this year of Bt 2,219bn, represent 77.4 per cent of total assets of 15 commercial banks. Data source: HS Asia

the Thai Military Bank.

Complacent managements preferred to deal with loyal corporate or trade customers rather than trim rates and fight for market share - an attitude which had developed by the 1990s into a highly successful quasi-cartel.

The Bank of Thailand has particularly disliked the widening

spread between deposit and lending rates, which appeared to hit smaller, non-prime borrowers disproportionately hard.

The average spread between all earning assets of the top six banks and all deposits widened from 3.07 per cent in 1991 to 4.74 per cent in the second quarter of 1993, twice what

most western bankers would feel lucky to get away with.

Unfortunately for the Bank of Thailand its influence over politically well-connected banks is of only limited effectiveness because, in the name of deregulation, it has deprived itself of the usual mechanisms used by central banks to control interest rates. Mr Graham Catterwell, country representative of Crosby Research calls it "deregulation without competition."

The global interest rate decline has relieved some of the pressure on borrowers, but the banks have generally maintained the wide spreads between deposit and lending rates.

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## THAILAND 4

Chiang Mai, Thailand's northern capital

## Bangkok in miniature

Chiang Mai has already begun to duplicate in miniature the problems which have afflicted Bangkok - traffic jams and pollution, compounded by a lack of urban planning, reports Victor Mallet

Chiang Mai, Thailand's northern capital, has come a long way since Ralph Fitch, a London merchant visiting in 1887, admired the sturdiness of its men and the beauty of its women and described the city as a "very fair and great town with fair houses of stone."

Some of its residents would even say that Chiang Mai has gone too far. Instead of building "fair houses," property developers have been furiously throwing up concrete shop-houses, condominiums and petrol stations. The air is filled with the dust and noise of road construction.

For the past five years, Chiang Mai has been a boom town. Foreign tourists and *newcomer* rich Thai businessmen, escaping the heat and traffic congestion of Bangkok, have flocked to the relatively cool climate of northern Thailand for their holidays and weekends. Speculation on land prices has enriched many of the locals.

The central government has contributed to the rapid development of Chiang Mai by redirecting manufacturing investment away from the overcrowded and polluted industrial zone around Bangkok and the eastern seaboard towards remote areas such as the north. Earlier this year, the

duration of tax breaks for investments in these areas was extended to eight years from six.

"This new move by the Board of Investment was a big step by the government," says Mr Pravit Arkarachon, president of the Upper Northern Chamber of Commerce and managing director of a Chiang Mai private hospital.

More than 80 companies are operating or have already reserved space in the eight-year-old industrial estate in Lamphun, 30km from Chiang Mai.

They include Murata Electronics and Hoya lenses of Japan. Among the more recent arrivals are Thailand's Hana Microelectronics, which is building a factory and dormitory for 1,000 workers, and Driessen Aircraft Interior Systems, the Dutch catering

equipment manufacturer which was finding it difficult to expand in Bangkok and wanted to avoid the high costs and traffic congestion of the capital.

Although it is Thailand's second city, Chiang Mai has long been a fraction of the size of Bangkok, with an official population of about 200,000 compared to capital's 5m.

It has already begun to duplicate in miniature the problems which have afflicted Bangkok - traffic jams and

pollution compounded by a lack of urban planning - thus undermining the very basis of its original allure for tourists and industrialists from the south.

A report on environmental problems by the municipal authorities this year contained a catalogue of woes, from inadequate rubbish collection to encroachment by builders on to public land. The filthy main canals in the city are described as a "disgrace."

Even in the new Lamphun industrial estate, waste disposal is a haphazard affair, with electronics companies burying toxic waste in drums or burning it inside their yards on Saturday nights because of the complexity of the paperwork required to send waste material out of the export processing zone.

"Fifteen years ago I left Bangkok and thought I'd made the right decision," says Mr Chayant Pholpoke, a travel agent better known for his environmental activism as part of the "For Chiang Mai" group which opposed the building of a cable car up Doi Suthep, the mountain overlooking the town.

"Now I'm not so sure," he adds. "It's another Bangkok I'm afraid, partly because people like myself (from Bangkok) are here."

There is no sign of an end to the growth of Chiang Mai, and the construction business has been boosted by plans to host the South East Asian Games in 1996. The town's 70th anniversary the following year may, however, give the inhabitants a chance to reflect on what they are doing to a city once renowned for its quiet Buddhist temples and clean air.

Mr Tanet Charoenmuang,

director of the local government studies project at Chiang Mai University, is scathing about the way the authorities have planned - or rather not planned - economic growth in northern Thailand and failed to spread development to outlying areas.

"Instead of learning from past mistakes - that people have made Bangkok the centre of everything - they are now making Chiang Mai the centre of everything," he says.

Asked whether the focus on Chiang Mai, instead of just on Bangkok, is not at least a start, he replies: "They are both bells. Chiang Mai is following Bangkok very closely."

"We will celebrate hell in three years from now when Chiang Mai celebrates its 700 years," he says. "We live in a very 'special' era because of cheap vehicles and very poor management."

Unlike academics, most entrepreneurs in northern Thailand show little concern for the environment, although they care about problems which could affect their businesses - including infrastructure difficulties such as a lack of telephone, a shortage of skilled workers and the spread of the human immunodeficiency virus that causes the disease AIDS.

Far from worrying about the "Bangkokisation" of Chiang Mai, local Thai businessmen fear that the rapid growth of the rival town of Chiang Rai - further north, as a centre for tourism and trade with China, Burma and Laos - will turn Chiang Mai itself into something of a backwater: a distant prospect perhaps, but one that might please those who emigrated from Bangkok in search of peace and quiet.



Virgin beaches and turquoise seas off southern Thailand's west coast provide exotic holiday venues for international tourists. But the surge of interest of the late 1980s has now slowed down. Picture by Sarah Murray

## Tourism's dip

From previous page:

visitors in 1987 alone.

Although a record 5.3m arrivals were recorded in 1990 the dramatic growth was already starting to tail off before the traumatic double blow of the Gulf War and a military coup in 1991. Arrivals dropped by four per cent in 1991 and then rose a sluggish 0.97 per cent in 1992. Thailand's political crisis reached a climax in May 1992 when troops gunned down pro-democracy protesters on the streets of Bangkok.

A 16 per cent pick-up over the first seven months of this year prompts Mr Bert van Walbeek, executive vice president of Bangkok tour operator Siam Express, to say: "Thailand could become for Asia what Spain became for Europe in the 1960s and 1970s. In five or 10 years' time the office lady in Shanghai will start taking hol-

days just as her equivalent in Stockholm did 20 or 30 years ago."

Nearly 60 per cent of arrivals between January and July this year were from east Asia, notably Taiwan and Korea. Chinese tourists rose a remarkable 231 per cent to 176,085 - only 5.35 per cent of the total. A pollster perhaps to the future, but hardly a big boost to revenues this year.

With hindsight it was in the glory days of Thai tourism that the seeds of the industry's current troubles were sown as eager entrepreneurs over-developed Thai resorts, trying to turn Thailand into an amusement arcade and thereby destroying the very qualities that attract visitors.

The fishing village of Pattaya, the east coast's first two decades been turned into a huge brothel fronting onto a polluted sea - thanks partly to the machinations of a local mafia.

Phuket Island's virgin beaches and turquoise seas off southern Thailand's west coast were the stuff of dreams - until a decade-and-a-half of feverish hotel building encouraged international passenger jets to land at regular intervals at the newly expanded airport.

The expression on the face of a local chemist who is also secretary-general of the Phuket Environmental Protection Association, Mr Vinai Rungratwattana, would make a good illustration for the wry T-shirt slogan "Another (expletive deleted) Day in Paradise."

"Phuket is skirting disaster. If I wasn't born here, I would move," he says. Myriad bars, cafes and guest houses proliferated in the shadow of Thailand's big hotels as every man and his dog tried to take money from tourists.

When the merry-go-round stopped, Thailand found it had priced itself out of the market for many European, north

## TOURIST ARRIVALS

Foreign visitors	1991	1992
From all countries	5,086,300	5,136,400
From all countries	808,400	729,500
From Japan	559,500	563,700
From Taiwan	453,900	474,300
From Singapore	350,100	324,300
From Hong Kong	241,400	291,200
From Germany	227,000	275,500
From the US	248,400	274,400
From the UK	197,800	236,500
From Australia	302,600	207,500
From France	177,900	193,100
From India	108,700	105,200

Source: Thai Tourism Authority

American and Japanese tourists. Yet many investors are blithely continuing to build as if the last two years were a minor hiccup, prompting the suspicion that many new hotels must count as "vanity investments" constructed to enhance the owner's prestige rather than merely to make money.

In Bangkok, the number of hotel rooms will grow by around 20 per cent in 1993 alone, helping to bring expected occupancy rates down from 53.22 per cent in 1992 to an estimated 48.65 per cent in 1993, compared with 88 per cent occupancy during the 1988 peak, according to Peregine Brokerage.

Not every hotel owner is thinking of jumping from the passenger view deck: tourists are increasingly avoiding Bangkok or Pattaya by flying directly into such locations as the northern capital Chiang Mai and Phuket as the rest of Thailand is "discovered."

Phuket occupancy rates were 38.69 per cent in 1992 when the number of rooms increased by 16.4 per cent, yet the degradation of Phuket, and other upcountry destinations, remains well behind Bangkok. There was a 106 per cent jump in arrivals in 1992 when 1.2m people visited the island and stayed for, an unusually long average of 10.89 days.

The south: where smuggling is a way of life

## The picture is changing

Traditionally, the region has felt ignored by the government, writes Kieran Cooke

At Yai, a short drive from the border between southern Thailand and Malaysia, has long been famous for its brothels, its barber shops - which double as massage parlours - and its bird's nests, the local delicacy served in the town's restaurants.

But Hat Yai's image is changing. The sleaze is still there but it's more discreet. Now families from Malaysia pack the town's well-kept streets looking for bargains in what local officials proudly describe as a shoppers' paradise. The hotels put on upmarket shows. Hat Yai bustles with new found prosperity.

The southern region of Thailand, stretching for more than 900km from Bangkok down to the Malaysia border, encompasses 14 provinces with a population of 7.3m.

Traditionally the region, particularly its most southern part, has felt ignored by central government. With a history of separatist struggles, the south was mistrusted.

Political and military power in Thailand has been controlled by Bangkok, the north and north-east. The south has been under-represented in parliament and in the higher ranks of the armed forces.

Infrastructure developments in the south lagged behind those elsewhere in the country. Few industries were set up in the area. Now the picture is different. A new administration under Mr Chuan Leekpai,

the prime minister who is himself a southerner, has committed itself to decentralisation and stepping up developments in the south.

A new highway, described as a land bridge linking the east and west coasts of the peninsula, has been given the go ahead. A 1,000-acre industrial estate, including an export processing zone, is being built near Hat Yai. Fish processing, canning and furniture factories have opened up.

But change in towns like Hat Yai has not come about through government policy. "There are virtues in being so distant from Bangkok" says Mr Weerapant Musngasarn of the local Prince of Songkhla University. "We've learnt to do things for ourselves and be self sufficient. This area has always been a trading centre. Now we are capitalising on the growing prosperity on both sides of the border."

Evidence of growing cross border connections is everywhere. Each day 12 luxury buses leave Hat Yai for Singapore. Shrimps and tuna, two of the south's main exports, go to Singapore for local consumption or transshipment.

Thailand has recently become the world's largest natural rubber exporter. Ninety per cent of the rubber is produced in the south. The bulk of exports go out through Penang in Malaysia - only 200km on a four lane highway away - rather than through Bangkok.

Last year more than 600,000 Malaysians visited the south. Each year about 40,000 Thai workers cross to northern Malaysia to harvest the rice crops - some with work permits, but many without. The authorities

in labour-starved Malaysia do not interfere.

More wealthy Thais go to Penang and elsewhere in north Malaysia to shop and visit friends and relatives. In the 1960s the Thai government banned the use of Chinese in schools. Many southern entrepreneurs sent their children to Penang to be educated.

"Our cross-border connections have helped the south develop an economy of its own," says Mr Chan Leekpai, president of the chamber of commerce in the southern province of Songkhla. "We may not have much political power, but our economic power is growing rapidly."

Smuggling has been a way of life for years in the south: noodles go north, electronic goods go south. Attempts at curbing the trade have been made, but with little effect. Most officials seem to turn a blind eye to the trade, worth millions each year - "if you live in the south and don't buy Malaysian goods, you must be mad," says a Thai businessman. "Here, cooking oil from Malaysia costs 18 baht per kilo. It's nearly double that in Bangkok."

Dismissing the various trade barriers between the countries of the Association of South East Asian Nations (Asean) has been a painfully slow process. A more modest attempt at liberalising trade has been made through the formation of cross border growth "triangles". Earlier this year Thailand, Malaysia and Indonesia agreed on the formation of a growth triangle linking the northern half of the Indonesian island of Sumatra, southern Thailand and northern Malaysia, including Penang.

## Frustration among Moslems

The port in Pattani province in southern Thailand is packed with fishing boats off-loading their catch, mainly from the rich fishing grounds around nearby Vietnam.

Young girls crouch over baskets, sorting the fish. All the girls wear the hijab, the Moslem headscarf.

"The workers are all Moslems" says Mr Woravit Baru, a Moslem scholar and lecturer at the local university. "But the *tokoy* (boss) is Thai Buddhist or Chinese."

There are nearly two million Moslems in southern Thailand. In Pattani province, they make up about 80 per cent of the population. Thailand is a state imbued with Buddhist values and ideals, with the monarchy and the bureaucracy functioning as an integral part of that world.

Southern Thailand's Moslem community has long resented the imposition of the Thai state and its Buddhist values - "this is a Moslem area, yet the state governor is not a Moslem, most important officials are not Moslems and many

teachers come from outside" says Mr Woravit.

A guerrilla group, the Pattani United Liberation Organisation (PULO), though believed to have only 300 members, still pursues the goal of a separate state. That officials blame PULO for attacks earlier this year on a train, a Buddhist temple and a group of soldiers in which at least six people died.

PULO is also held responsible for the burning of more than 30 schools in August. But locals say the burnings are the result of infighting in the armed forces and feuds between powerful local families.

Whatever the truth behind these incidents, there is no doubting the frustration local Moslems feel with what they perceive as an uncaring and insensitive administration.

The semi-derelict Kruze mosque in Pattani is one of the region's more important Moslem sites. Locals say officials should not have allowed a Chinese temple to expand next door. The temple has now become a tourist attraction.

Each day coach parties of Chinese arrive to let off fire crackers and make offerings to their gods, disturbing Moslems at prayer.

Most Moslems live in the villages and work in agriculture, mainly in rubber. Rubber prices have been falling and income levels have dropped. In Pattani, unemployment is highest than in any other southern province. Moslems say the province's fish processing industry, the rubber factories and the canneries are controlled by outsiders and little benefit goes to locals.

"We want to set up Islamic banks so that we can do business," says Mr Woravit. "But the government won't let us."

Pattani's Moslems are keenly aware of the privileges accorded to their fellow Moslems south of the border in Malaysia. The new administration in Bangkok has pledged to make more effort to improve the living standards of Moslems. Investors are being encouraged to set up factories in the area.

Kieran Cooke

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